

**NABAA**  
**NEIGHBOURHOOD**  
**PROFILE & STRATEGY**  
*Bourj Hammoud, Lebanon*

## FOREWORD

“Building development to address the emergency” is the philosophy behind the intervention that the Italian Agency for Development Cooperation (AICS) is financing and realising together with the United Nations Human Settlements Programme (UN-Habitat).

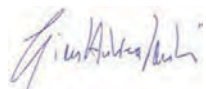
“Building development” because working to strengthen infrastructure and enhance public services in the marginal areas of Lebanese cities is, in the medium and long term, a principal road to a better quality of life for vulnerable groups of the population.

“Address the emergency” since the rapid and constant urbanisation of the country’s cities is a factor associated with social vulnerability in many metropolitan areas. Whilst urbanisation is an established trend in Lebanon, the process has surged over the last six years with the influx of over a million refugees fleeing the Syrian civil war.

The rapid increase in urban population is impacting on the daily life of host communities, adding stress to social and health infrastructure, on the local economic fabric and on the social organisation of the neighbourhoods.

For these reasons we consider that a multisectoral approach, that involves civil society and stakeholder institutions, as characterises this project, is the best tool to address the situation. Because of its structural characteristics in terms of duration and scale, the situation cannot be addressed as a mere emergency, but needs actions aimed at urban reshuffle, economic development and social growth.

From analysis of overall conditions in neighbourhoods from four cities, the production of profiles based on identified needs that can inform integrated solutions to social, economic and structural challenges, this is work that, with the support of AICS, UN-Habitat is committed to realising.



Gianandrea Sandri  
Director of the Italian Agency for Department Cooperation (AICS), Beirut.

Bourj Hammoud is a municipal district with one of the most diverse populations in the country. It is also one of the most active and vibrant industrial and economic hubs.

Being on the northern boundary of the capital, this swampy area was home to a few farming families, until survivors of the Armenian Genocide were settled there by the authorities of the day. These and their descendants inhabited the area and constructed residences and businesses there. The area became a prosperous industrial and commercial zone that soon turned into an attraction point for job-seeking people from around the country and abroad.

Today, this densely populated area is facing several challenges due to the civil war, successive conflicts and general neglect. We are determined to overcome these challenges. We have already begun with dealing with some of the most urgent issues, as well as planning for the rehabilitation and improvement of our city.

In this context, the neighbourhood profile and the neighbourhood strategy could prove to be a valuable tool in helping to determine the most urgent needs, and in guiding partial or holistic interventions in ways that “fit the part into the master plan”.

We welcome this report, and highly appreciate the efforts that were put into it. We intend to make the most of it for the benefit of Bourj Hammoud and the Nabaa neighbourhood. We hope that UN-Habitat will work with us to extend the Nabaa profiling exercise to the remainder of Bourj Hammoud, a territorial unit that shares common conditions and challenges.



Mardig Boghossian  
Mayor of Bourj Hammoud

On behalf of UN-Habitat Lebanon, I would like to express our deep appreciation to the Italian Cooperation for Development for their generous support, which made this document possible. I also acknowledge the commitment of the Municipality of Bourj Hammoud in facilitating the work of the team, contributing to the provision of data and reviewing drafts. I highly appreciate the involvement of community members and other actors in providing valuable inputs into the assessment and validation processes.

I would like to acknowledge the partnership with the University of Notre Dame (NDU), through which 42 students contributed to the field work, providing input in the building and infrastructure assessment. The on-going collaboration with ACTED which goes beyond this profiling exercise in Nabaa, is also recognised. Gratitude is due to community mobilisers who facilitated the work of the field team and encouraged the cooperation of community members.



Tarek Osseiran  
Country Programme Manager at UN-Habitat Lebanon

## CREDITS & ACKNOWLEDGEMENTS

The Nabaa Neighbourhood Profile and Strategy was prepared with information collected through a field assessment and interviews with local residents and key neighbourhood members. We wish to thank them for their contribution to the production of the Neighbourhood Profile for Nabaa, which provided the foundation for the Neighbourhood Strategy.

The field work was conducted by:

- Fourth year architecture students from Notre Dame University (NDU) in Lebanon: Raia Abi Aoun, Christelle Moussa, Ragheb Salameh, Yara Younes, Thierry-Georges Khalil, Michel Nacouzi, Rawad Al Kadi, Neveen Al Zowaini, Maysam Al Richani, Anthony Badawi, Nada Keyrouz, Johnny Ghanimeh, Farid, Geagea, Line Nehme, Clara Habib, Samer Zod, Christina El Saïdy, Rnady Ghraizy, Ghady Abou Habib, Sarah Dsouki, Yehya Yassine, Georges Abi Karam, Roudy Fattouh, Camelia Mina, Aline Tashijian, Melina Salhab, Jad Hani, Cynthia Matta, Ali Saad, Suzanne Mohammad, Jad Nasser, Mikael Nakhle, Elie Matar, Nancy Al Aridi, Rosemary Chamoun, Oliver Hachem, Georges Mehanna, Maria Diane Nakhoul, Andrew Al Tamer, Ghiwa Khoury, Marie Lyse Azzi and Layla Antoun-Tartak.

- Community mobilisers: Ahmad Fakhr El Din, Ali Nasserline, Fadi Fakhr El Din, Fatima Fakher El Din, Fadwa Iskandar, Hayat Fakhreddine, Iman Alyatama, Lina Chamas, Liza Dichakejian, Mhammad Hadla, Mhammad Zaydan, Nissrine Iskandar, Rania Nahra, Rabab Iskandar, Renee Brayteh and Zainab Al khamis.

- UN-Habitat Lebanon Staff: Ali Saad, Amal Merali, Christelle Khalil, Dani Harake, Elie Mansour, Hassan Zaiter, Hayat Gebara, Khalil El Hariri, Lady Habchi, Marwa Boustani, Maria Karam, Maryam Nazzal, Riham Kowatly, Samer Schinder, Sawsan Saad, Suzanne Maguire, Synne Bergby and Peter Khoury.

- The findings were validated through a series of meetings with local representatives of different age, gender and professions. The participants were comprised of: Georges Krikorian (Municipality of Bourj Hammoud), Wael Zaayter (Activist/ Municipal Police Guard), Mohammad Hachem (El Ahliah School Director), Hayat Fakhreddine (Activist), Moussa Cherri (Mokhtar), Miled Aoun (Mar Takla School Director), Ferial Aoun (Mar Takla School), Rajaa El Zein (Syrian Refugee), Fawziye Blayble (Activist), Louis Saad and Christian Saker (ACTED representatives), Elie Najjar and Ghassan Assaad (Key informants) and Issam Lamaa (Key informant).

This report has been prepared by Dani Harake and Riham Kuwalti, with major contributions from Ali Saad, George Abi Sleiman, Julie Brun and Rena Abou Chawareb; and input from Elie Mansour, Maryam Nazzal, Nour Lababidi, and Suzanne Maguire, and all of UN-Habitat Lebanon.

## NEIGHBOURHOOD PROFILE PURPOSE

A neighbourhood profile is a multi-sectoral, multi-cohort spatial analytical tool to improve the urban crisis response in poor neighbourhoods in line with the Lebanese Crisis Response Plan 2017-2020 and the UN Strategic Framework for Lebanon 2017-2020.

UN-Habitat produces complementary city\* and neighbourhood profiles that each lead to strategy formulation and project implementation. Neighbourhood profiles inform targeting for humanitarian organisations and local authorities. They also contribute to building a national database of comparable data that can be used for better understanding and monitoring of urban dynamics in the most vulnerable urban pockets that city and district averages are blind to, and of how these relate to their wider urban contexts.

## METHODOLOGY

UN-Habitat neighbourhood profiling consists of three phases:

**Phase 1** comprises a field assessment in a two-part process. Part one is to identify and record the condition of the buildings, the basic infrastructure services, and all commercial activities, on a base of a comprehensive visual inspection. Part two involves a population count by residential unit based on open-ended interviews with key informants for each building. Information is collected using GIS-based mapping and systematic questionnaires.

**Phase 2** consists of conducting a series of focus group discussions and key informant interviews with residents, local public officials (mukhtars), business owners, school principals, healthcare managers, religious figures, and (I)NGO representatives. The selection of focus group participants takes into account factors such as age, gender and nationality.

**Phase 3** entails presenting the findings to municipal representatives and community members in order to build consensus regarding problems and opportunities. The findings are refined based on feedback from this participatory stage. This approach ideally results in a mutual agreement on problems including capacity gaps and priorities.

## NEIGHBOURHOOD STRATEGY PURPOSE

The Neighbourhood Strategy is a spatial and thematic phased response plan that is informed by the outcomes of the Neighbourhood Profile (NP) (UN-Habitat, 2016) for the same area.

UN-Habitat Lebanon produces neighbourhood strategies as a basis for fostering coordinated action between partners to the Lebanon Crisis Response Plan and local authorities to enhance the response in urban neighbourhoods. The strength of the recommendations derives from their area-based nature, as an alternative to cohort-based or sector-based points of entry. The area-based approach starts with a defined geography in which integrated multi-sector and multi-stakeholder action and engagement may be advanced, potentiating optimal targetting, holistic programming and operational efficiencies. Substantively, the strategies focus on improving living conditions through community stabilisation, the upgrading of basic urban services and housing, and improving capacity for effective governance. Recommendations are phased in order of identified needs, irrespective of the actual or likely availability of funds.

## METHODOLOGY

Interventions have been formulated with input from local and municipal representatives, active stakeholders, and focus group discussions. The strategy suggests actions that respond to specific social, economic and urban challenges phased in the following format:

- **Immediate Response:** An intervention that should be undertaken within six months due to its criticality for social stability or to emergency need in the realm of basic urban service provision.
- **Short-term Response:** An intervention that should be undertaken within a year to mitigate further deterioration.
- **Mid & Long Term Response:** An intervention that should be undertaken within two or four years respectively, due either to its secondary or tertiary priority level or to the time frame needed for its execution. General strategic directions likely to be of ongoing relevance may also be outlined under this response phase.

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\*The City Profile is a continually updated geographical, statistical and multi-sectoral description and analysis of the urban area of a city, where the boundary is defined by the continuously built up area. Its purpose is to inform the urban crisis response, generate a national urban database, lead to a City Strategy, and inform strategic project identification.

### Disclaimer :

The omission of potential interventions may be due to the selective scope of UN-Habitat and/or the current methodology, or may require further study.

## RESOURCES FOR IMPLEMENTATION

Interventions proposed in this document require resources for implementation. There is a wide spectrum of resource types from the monetary to the non-monetary in nature and the local to non-local in origin.

Monetary resources can emerge from:

- Local NGOs or municipal budgets, or private sector organisations (e.g. through Corporate Social Responsibility spending).
- Non-local national/international donors and NGOs, and various public sector budgets.

Non-monetary resources can be:

- Competences such as local volunteered community-based capacities.
- Formal governance capital such as institutional powers vested in municipalities or regional/national state entities.

Monetary and non-monetary resources are to an extent interchangeable though interventions typically require a combination of both for implementation and sustainability. Monetary resourcing requirements set out against Urban Upgrading interventions are indicative estimates, and do not specify sources of capital. Further, costs may be open to value engineering; specifically, optimal coordination of interventions in time and space can maximise impact per unit cost.

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UN-Habitat Lebanon City and Neighbourhood reports are available online at <https://unhabitat.org/lebanon/> or <http://data.unhcr.org/lebanon/>.

For further information including GIS data, contact [info.lebanon@unhabitat.org](mailto:info.lebanon@unhabitat.org).

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## LIST OF ACRONYMS

<b>EDL</b>	Electricité du Liban
<b>GUPW</b>	General Union of Palestinian Women
<b>LEB</b>	Lebanese nationals
<b>MEHE</b>	Ministry of Education & Higher Education
<b>MOEW</b>	Ministry of Energy & Water
<b>NRC</b>	Norwegian Refugee Council
<b>PARD</b>	The Popular Aid For Relief and Development
<b>PRL</b>	Palestinian Refugees from Lebanon
<b>PRS</b>	Palestinian Refugees from Syria
<b>RTO</b>	Regional Technical Office
<b>SLWE</b>	South Lebanon Water Establishment
<b>SR</b>	Syrian Refugees
<b>UN-Habitat</b>	United Nations Human Settlements Programme
<b>UNRWA</b>	United Nations Relief and Works Agency

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## EXECUTIVE SUMMARY

The selection process of Nabaa was jointly conducted by local authorities, (I)NGOS active in the neighbourhood, local community representatives, and UN-Habitat Lebanon. The aim was to select a vulnerable urban neighbourhood with poor socio-economic status, sharing stresses on basic urban services. The boundary verification was carried out through a participatory approach using community-based knowledge, (I)NGOs and municipal expertise.

The Nabaa neighbourhood is strategically located near the eastern gate of the centre of Beirut at an important cluster of principal roads connecting with major hubs and regions. Nabaa is a planned neighbourhood that is well structured. It is a poor residential area characterised by deteriorated infrastructure and inadequate access to basic urban services offering poor living conditions for its residents. Combined with the limited capacity of the local authorities and service providers, (I)NGOs are particularly active in the area, but sometimes lack coordination between one another.

This neighbourhood also includes small shops and workshops that constitute part of its economic base. Many residents work in the service industry in other areas of Beirut. The number of small businesses has increased in the recent years, however most do not survive for more than five years. A complex socio-cultural environment, reported high unemployment and school drop-out rates, as well as limited law enforcement pose a threat to safety, with street fights, weapon possession and discrimination reported by key informants and community members.

Improving gender equality, enhancing environmental safety for children and empowering youth can help foster a stabilised community. Addressing building conditions and basic urban services management, guided by identified gaps and challenges, has the potential to reinforce social stability by improving livelihood opportunities, the neighbourhood's accessibility, a more secure environment and better quality of life.



A photograph of a weathered, multi-story building. The walls are peeling and stained. A clothesline with various items of clothing hangs across the middle. A white plastic chair sits on a ledge. In the foreground, a satellite dish is mounted on a wall, with Arabic text and a phone number written on it. The scene is cluttered with wires and pipes, suggesting a densely populated, possibly informal settlement.

# PART 1. NEIGHBOURHOOD PROFILE

سامر القلبي  
٠٢/٢٥٩٧٩١







# SPACE

The neighbourhood of Nabaa is located in the eastern suburbs of Beirut within Bourj Hammoud cadaster. It is a densely built up residential area in Greater Beirut, accommodating low income population groups including poor Lebanese, Syrian, Palestinian and Iraqi refugees and foreign migrant workers from African and Asian countries.

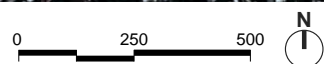
Since the 1930s, the neighbourhood has developed incrementally from empty agricultural land with some farmhouses into a high density urban area today.

Nabaa's historical demographic pattern has influenced space development. The neighbourhood witnessed its first demographic growth wave in 1915 after the Armenian genocide when displaced

Armenians settled in three camps in Bourj Hammoud. The 1980 and 2006 Israeli invasions of Beirut and South Lebanon also forced major migration of Shiite families into the area. From 2011, Nabaa witnessed a dramatic increase in Syrian residents seeking refuge from the Syrian war. All these changes have transformed the socio-economic structure of the neighbourhood.



Figure 1 Aerial map showing Nabaa in Bourj Hammoud and its neighbouring cadastres



# GOVERNANCE

## STATE / FORMAL:

Nabaa falls within the jurisdiction of Bourj Hammoud Municipality in the Metr District and belongs to the administrative division of Mount Lebanon Governorate. The municipality is facing different challenges in addressing gaps related to basic urban services. This is likely due in part to a shortage of financial, technical and human resources, and increased population.

Informants report weak coordination between active organisations and local authorities, hindering returns on investment.

There are six mukhtars<sup>1</sup> present in Nabaa, and a general security office in Bourj Hammoud representing central administration. Central administrative services are physically accessible to residents.

During municipal elections, Nabaa Lebanese residents do not collectively have a major impact as most are displaced from the South of Lebanon and from the Bekaa and are ineligible to vote outside their registered locality of origin. Focus group discussions undertaken in

Nabaa by ACTED indicated that residents feel marginalised by the municipality. (ACTED, Social Mapping, 06/2015).

Today, the new municipal council elected in 2016 is working on rebuilding trust with residents by undertaking initiatives in the neighbourhood such as removing sidewalk infringements, providing regular maintenance services for sewage systems, and organising meetings with neighbourhood representatives, including women groups, to listen to their concerns.

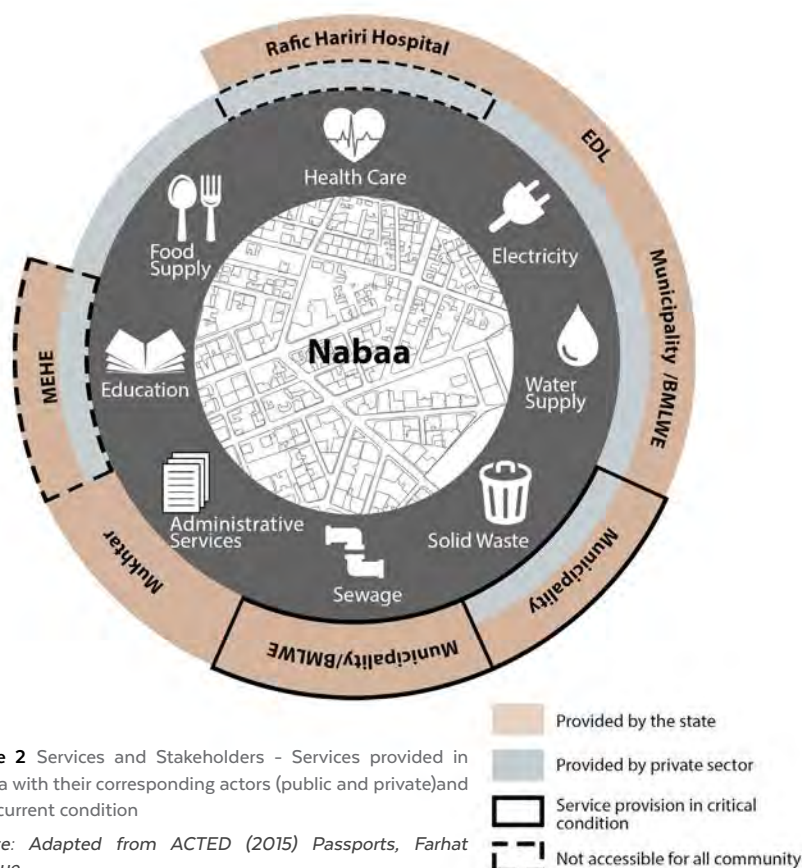
However, the municipality struggles to intervene in Nabaa due to conflicts of interest with private service providers (water, electricity, cable TV, internet). For example, the municipality wanted to initiate a project to manage all electrical wirings but, according to the municipality, the “mafia” - private generator owners, backed by politicians, were more powerful and were able to interrupt the project. Similarly, one of the main powerful entities within Nabaa are the housing brokers who control the rents without the supervision or management of the authorities.

## NON-STATE / INFORMAL:

- Civil society is considered a backbone of support to Nabaa residents. This is reflected in the active engagement of NGOs by implementing community development projects.
- Municipal services are poor and do not meet residents’ basic needs.
- Residents rely on local leaders and/or (I)NGOs for assistance.
- There is an absence of effective formal law enforcement which leads to informal security networks, involving especially young males who form street gangs.
- The lack of official security services is a serious concerns among women and girls who report frequent harassment and a sense of unsafety.

<sup>1</sup> Mukhtars are state representatives elected at neighbourhood or village level responsible for some official functions, such as registering births, deaths and marriages; ensuring the implementation of circulars; and distributing administrative bulletins on behalf of the Ministry of Interior and Municipalities

## SERVICES & STAKEHOLDERS



**Figure 2** Services and Stakeholders - Services provided in Nabaa with their corresponding actors (public and private) and their current condition

Source: Adapted from ACTED (2015) Passports, Farhat Mosque.



# POPULATION

## POPULATION COUNT

The population count was surveyed by residential unit based on key informant interviews for each building. The residential unit is a self-contained space used for a residential purpose by one or more persons. It may include an apartment, rooftop addition, studio, basement etc. The Nabaa population survey, Nov. 2016, suggests an all-cohort resident count of 14,760. Of these, almost two-thirds were Syrians refugees and one-third Lebanese. The average residential unit size in terms of residential count is greatest amongst Syrian refugees at 5.3 people / residential unit. Residential density at building level, to an extent a function of number of storeys, is shown (figure 3) to illustrate the distribution of population across the neighbourhood. Generally, the population density gradient rises to the south.

**14,760**  
Total Residents in Nabaa



Figure 3 Population in Nabaa

Source UN-Habitat Lebanon, November 2016

<sup>1</sup> Others : African, Filipino, Sri Lankan, Bangladeshi, Indian.

## POPULATION DISTRIBUTION BY RESIDENTIAL UNIT

Population distribution with respect to number of residents per residential unit, showing actual numbers and percentage breakdown between Lebanese, Syrian, and Others<sup>1</sup>. Lebanese occupied units tend to contain a smaller number of residents, while Syrian occupied units are often overcrowded where residential units housing 6 or more residents are dominantly Syrians.

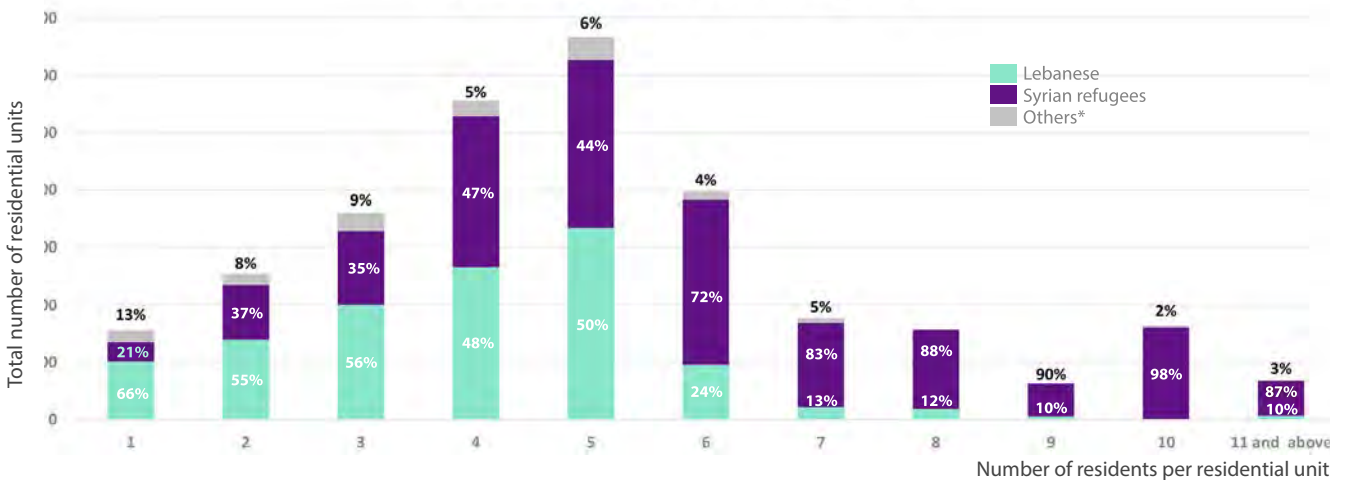


Figure 4 Population distribution by residential unit



No. residents/ unit	Lebanese				Syrian				Others				Total			
	No. residential units	% of residential units	No. residents	% of residents	No. residential units	% of residential units	No. residents	% of residents	No. residential units	% of residential units	No. residents	% of residents	No. residential units	% of residential units	No. residents	% of residents
1	102	9	102	2	33	2	33	0.4	20	12	20	3	155	5	155	1
2	139	12	278	6	95	6	190	2	20	12	40	6	254	9	508	3
3	201	17	603	13	127	8	381	4	32	19	96	15	360	12	1080	7
4	266	22	1064	22	263	16	1052	11	26	16	104	16	555	19	2220	15
5	334	28	1670	35	292	18	1460	16	40	24	200	31	666	22	3330	23
6	96	8	576	12	287	18	1722	18	14	8	84	13	397	13	2382	16
7	22	2	154	3	146	9	1022	11	8	5	56	9	176	6	1232	8
8	19	2	152	3	137	8	1096	12	0	0	0	0	156	5	1248	8
9	6	1	54	1	56	3	504	5	0	0	0	0	62	2	558	4
10	0	0	0	0	160	10	1600	17	3	2	30	5	163	5	1630	11
11 and above	7	1	81	2	28	2	314	3	2	1	22	3	37	1	417	3
<b>TOTAL</b>	<b>1192</b>	<b>100</b>	<b>4734</b>	<b>100</b>	<b>1624</b>	<b>100</b>	<b>9374</b>	<b>100</b>	<b>165</b>	<b>100</b>	<b>652</b>	<b>100</b>	<b>2981</b>	<b>100</b>	<b>14760</b>	<b>100</b>

Table 1 Population distribution by residential unit

## BOURJ HAMMOUD POPULATION ESTIMATES

**ESTIMATE 1:** Based on the comprehensive Nabaa population count, the Bourj Hammoud population total can be estimated through extrapolations based on satellite image analysis of the cadaster's built-up area. Extrapolation from Nabaa suggests an all-cohort Bourj

Hammoud population of 104,873. At least one caveat is that the cohort mix and uses mix (residential vs. non-residential) as well as density at residential building and unit level (this is known to vary by cohort) of Nabaa are assumed to be uniform across the cadaster.

**ESTIMATE 2:** Official cadastral figures for the various cohorts used by all partners to the Lebanese Crisis Response Plan (Government of Lebanon and the United Nations, 2017) suggest a total of 93,881 for Bourj Hammoud. This is 12% lower than Estimate 1.

Cohorts	Estimate 1		Estimate 2	
	Extrapolation from Nabaa NP	Source	Official Figures	Source
LEB <sup>1</sup>	-	-	75,866	1997 Figures adapted in LCRP (Government of Lebanon & the United Nations, 2017)
SYR	-	-	17,927	UNHCR 2015
PRL <sup>1</sup>	-	-	11,938	UNRWA, 2016
PRS	-	-	88	UNRWA, 2016
<b>Total<sup>2</sup></b>	<b>104,873</b>	<b>UN-Habitat</b>	<b>93,881</b>	<b>Various above</b>

<sup>1</sup> The 1997 household survey on which this data set is based includes PRL outside camps. As there are no Palestinian camps in Bourj Hammoud, 100% of the cadaster's PRL are assumed to be included in the Lebanese figure.

<sup>2</sup> The total is the sum of Leb, SYR and PRS.

Table 2 Alternative population estimates for Bourj Hammoud cadastre



\*The northern part of Bourj Hammoud has been excluded because it consists of scattered industrial built-up areas, in contrast with the uniform residential extrapolated area.

Figure 5 Population in Bourj Hammoud

Figures for Estimate 2 suggest that Syrian refugees make up between 19% of the total Bourj Hammoud cadastral population. Comparing this to the 63% proportion that Syrian refugees contribute to the Nabaa population mix,

there is limited value in extrapolating Nabaa densities to the cadaster as in Estimate 1, given the dramatic difference in average household size between cohorts.

As a related point, the planned nature of the cadastre's urban fabric may have meant that densification has not been possible to the same extent as in other poor neighbourhoods profiled by UN-Habitat.

# SAFETY & SECURITY

The following findings are from a series of focus group discussions conducted in Nabaa with groups of different age, gender and social status. Participants were asked a series of general questions addressing safety and security, risks currently faced in the community, types of violence experienced by women and girls, as well as availability of and access to services and support. The focus groups were designed to provide qualitative data on the experiences of neighbourhood residents, especially women and girls. The findings can be used to inform and strengthen existing or planned interventions in Nabaa.

## Main findings:

- There is a feeling of insecurity and non-belonging within the original host community due to the recent dramatic demographic change that saw vast numbers of Syrian refugees and foreign migrant workers from diverse ethnic, religious and sectarian backgrounds.
- The neighbourhood reportedly experience tensions that sometimes escalate into fights. Participants viewed that this is due to many factors including cultural differences and diversity.
- Recurrent cases of verbal and sexual harassment of women and girls were reported.
- There is a perceived absence of law enforcement officers to meet the security and safety demands of the local community. This is reflected in residents' reliance on local political parties to respond to their security concerns.
- Women and girls do not feel safe walking and commuting along the neighbourhood streets at night.
- There is a lack of public open space that serves as a safe meeting place for women and girls, and no appropriate playground for kids.
- Alcohol and drug addiction among the youth is reportedly on the rise.
- A sense of insecurity at night is prevalent due to fights in the streets, gang gatherings, alcohol and drug abuse, and weapon possession especially amongst young men.



# CAUSES AND EFFECTS OF SOCIAL INSTABILITY

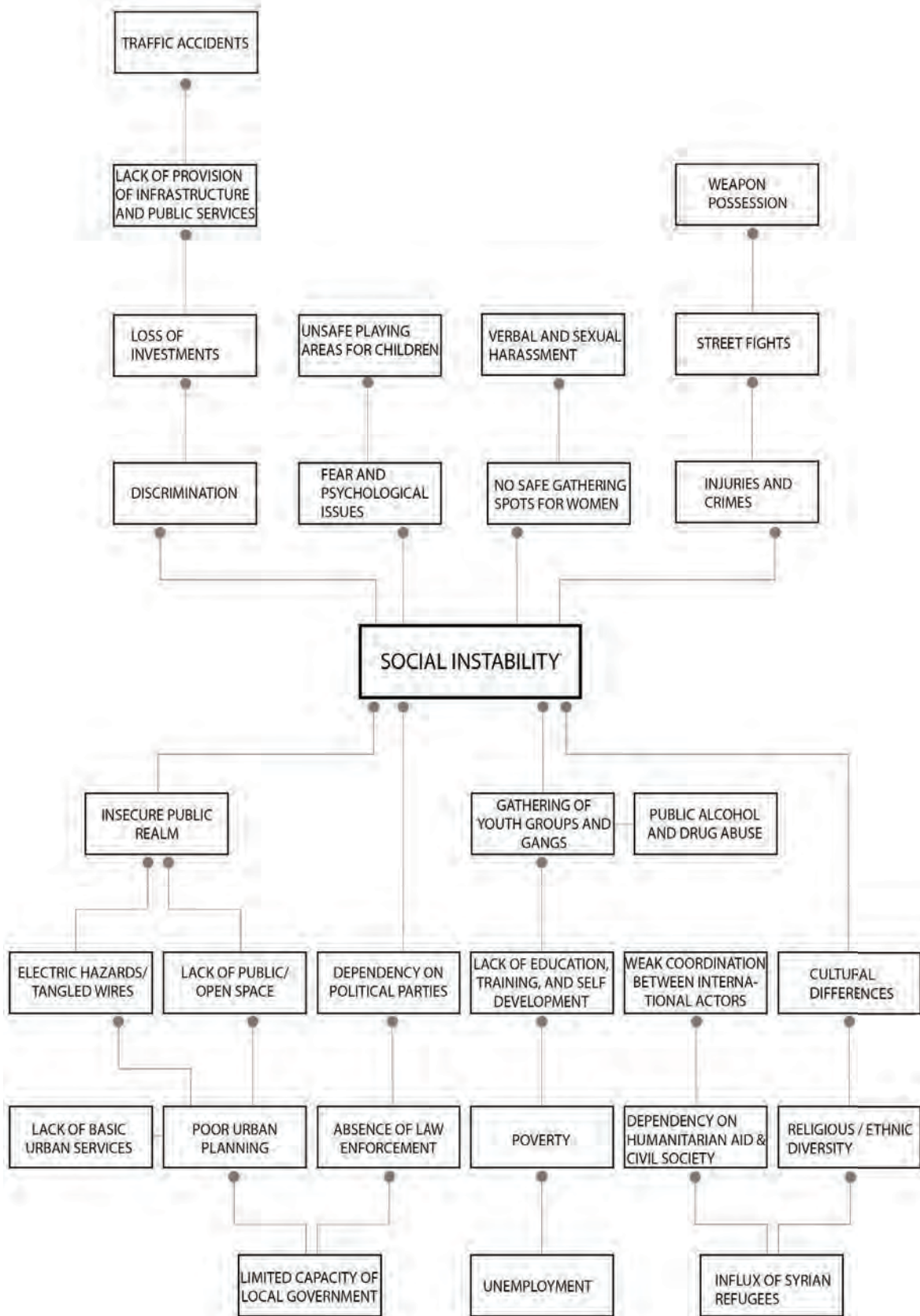


Figure 6 Problem tree analysis based on socio-economic conditions and safety & security findings



# SOCIAL SERVICES



Figure 7 Service providers: Map outlining the social services provided in Nabaa and its surroundings

Demographic fluxes throughout the years have enriched Nabaa's population diversity and brought in residents from different nationalities and ethnicities, contributing to the diversity of social and cultural traditions, languages, educational levels and political affiliations. The main political parties (Hezbollah, Haraket Amal, Lebanese Forces, Al Kataeb party, Al Taakhi and Tachnag Armenian Movement) play a significant role in the support of residents in terms of services and protection against a context of reported weakness in municipal and governmental sustenance. Many (1) NGOs (ACTED, Armenian Relief Cross of Lebanon, El Emad etc.) also contribute to the provision of some basic social services.

Formal and informal interviews were undertaken with neighbourhood stakeholders including the mukhtar, the head of ARCL, the director of the Armenian Orthodox School, residents and workers, business owners such as

the owner of a shoe-making factory, volunteer women, and young boys. Findings indicate that residents face various social issues, such as:

- Different social and cultural traditions create gaps between residents from different nationalities.
- There is an abundance of political markers that hinders cohesion between residents.
- Social tension arises from the competition between residents for housing and services.
- There is inadequate infrastructure services with increasing stress on water and electricity supply which hinders social development.
- Lack of social infrastructure affects community wellbeing.
- There is limited interaction between residents due to daily occupations (work, housework). Religious events and ceremonies are the only chance for



© Christelle Khalil, UN-Habitat (2016)

## HEALTH<sup>1</sup>

The increased population density in Nabaa has led to elevated pressure on health care centres. Moreover, inadequate awareness provokes a lack of personal prevention, hygiene, and a spread of epidemics and chronic diseases.<sup>2</sup> All participants of the household social mapping were aware of the hospitals in the area: Al Hayek Hospital and Saint Joseph Hospital. However, Syrian refugees rely on Beirut Governmental Hospital (Rafic Hariri) in Jnah due to

its affordability. As for Primary Health Care centres, four dispensaries meet the standards of the Health Ministry which are: the Armenian Red Cross, the Greek Orthodox Dispensary, the Nuns Dispensary, and Al Sader Dispensary. UNHCR built a partnership with the social development centre, Karakozian Dispensary, to provide registered Syrian refugees with basic health services.



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## EDUCATION<sup>1</sup>

Nabaa's educational sector faces an increase in school dropouts due to several factors such as the lack of a healthy school environment, scarcity of financial resources and rocketing numbers of students; particularly the level disparity between Syrian and Lebanese students.<sup>2</sup> Public schools in Bourj Hammoud are limited with only three schools accommodating around 700 students. These facilities are appropriating residential buildings that do not meet the minimum building standards for educational institutions. However, private schools are providing high quality education at competitive prices. The neighbourhood includes five private schools: Mar Takla, Mar Sarkis, Al Tarakki, Al Mowaten, Mar Maroun.

There are reportedly high rates of school drop-outs especially amongst Syrian children. Some Syrians have been unable to register their children due to:

- A lack of vacancies in schools
- The need for children to work to help support the family
- High transportation fees to/from schools relative to incomes which are not covered by the UN/other partners
- A lack of awareness about how or where to access public schools.

It is important to note that religious affiliations play a major role when it comes to choice of schools. The only school that was considered acceptable for all factions was the public school at the southern border of Nabaa.



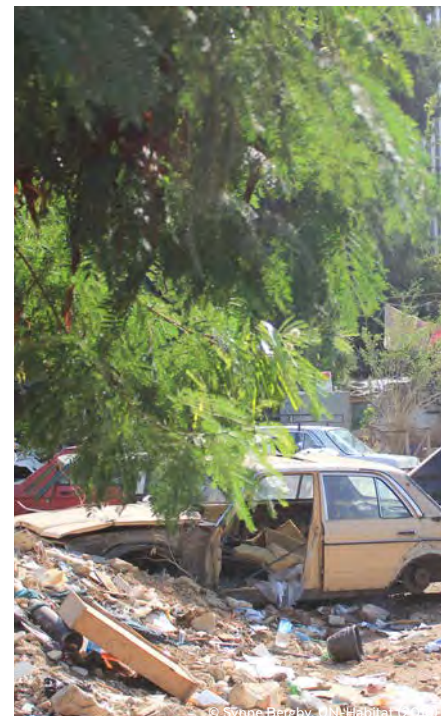
© Synne Bergby, UN-Habitat (2016)

<sup>1</sup> ACTED, (2015,Jun), Social Mapping Report.

<sup>2</sup> Ministry of Social Affairs, UNDP, (2015), The Maps of Risks and Resources, Municipality: Bourj Hammoud.



© Sawwan Saad, UN-Habitat (2016)



© Synne Bergby, UN-Habitat (2016)

# LOCAL ECONOMY & LIVELIHOODS

Commercial activities at a street level consist of shops and small industries dispersed across the area. These predominantly serve locals, but also a city-wide array of consumers seeking affordable products and services. All shops and workshops in the neighbourhood are micro sized<sup>1</sup>, with 10 employees or fewer. Based on the needs identified through the MRR<sup>2</sup>, the livelihood sector in Bourj Hammoud is experiencing an evident decline of local artisans, leading to the extinction of craftsmanship and an increase in unemployment.

In terms of the number of commercial premises, shops account for 83% of economic activities in the neighbourhood, which are divided into different categories, including food and groceries (30%), boutiques (17%), beauty salons (11%), electronics and phones (14.5%), hardware-furniture and storage (13%), and restaurants and cafes (6%). There were also miscellaneous categories (8.5%) that were either not identified because the premises were closed, or were offices, laundry, financial services, jewellery stores, and gyms. There is also a number of workshops that account for 17% of commercial premises. The types of workshops are illustrated in Figure 9 below. Small industries and craft-works of gold, shoe, and leather production are common within the Armenian community of Bourj Hammoud.

As shown in Figure 9, there is an abundance of new businesses that have been in the area for 0-5 years (47%). Mature businesses that have been operational for more than 10 years (33%) seem to be the second most prominent. Established businesses is the smallest category, which have been operational for 6-10 years (20%). Furthermore, 50% of established businesses were owned rather than rented.

Other findings entail:

- During field mapping, a significant incidence of child labour was observed.
- There are reported high rates of unemployment amongst youth, shortage of job opportunities or limited enforcement of employment laws.
- Residents have limited purchasing power as most of their income is spent on basic needs, rent and services.

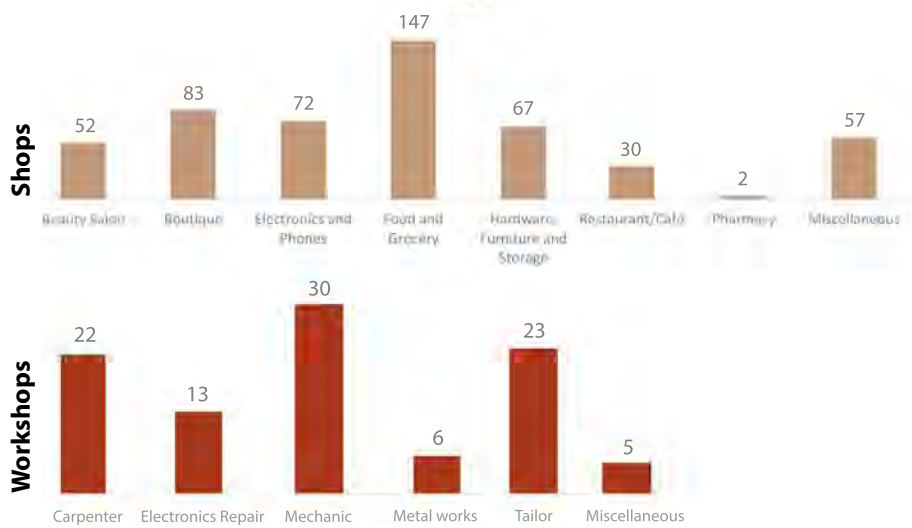
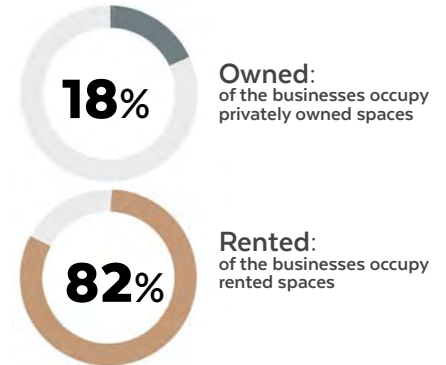


Figure 8 Categories of shops and workshops

## OPENING HOURS



## OWNERSHIP



## BUSINESS AGE

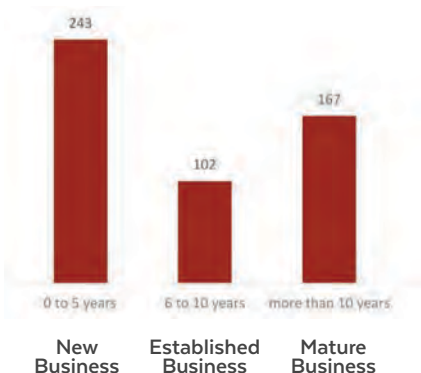
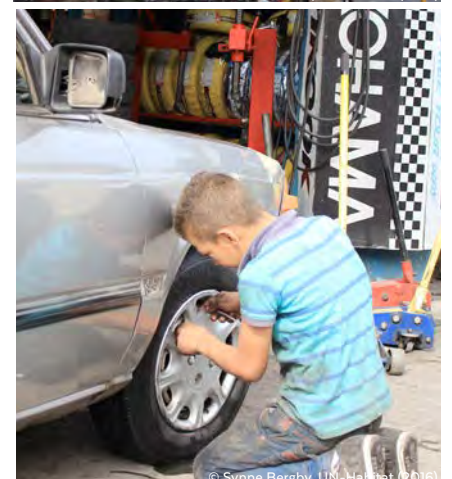


Figure 9 Business growth stage



<sup>1</sup> Ministry of Economy and Trade, (2014), Lebanon SME Strategy.

<sup>2</sup> Ministry of Social Affairs, UNDP, (2015), The Maps of Risks and Resources, Municipality: Bourj Hammoud.

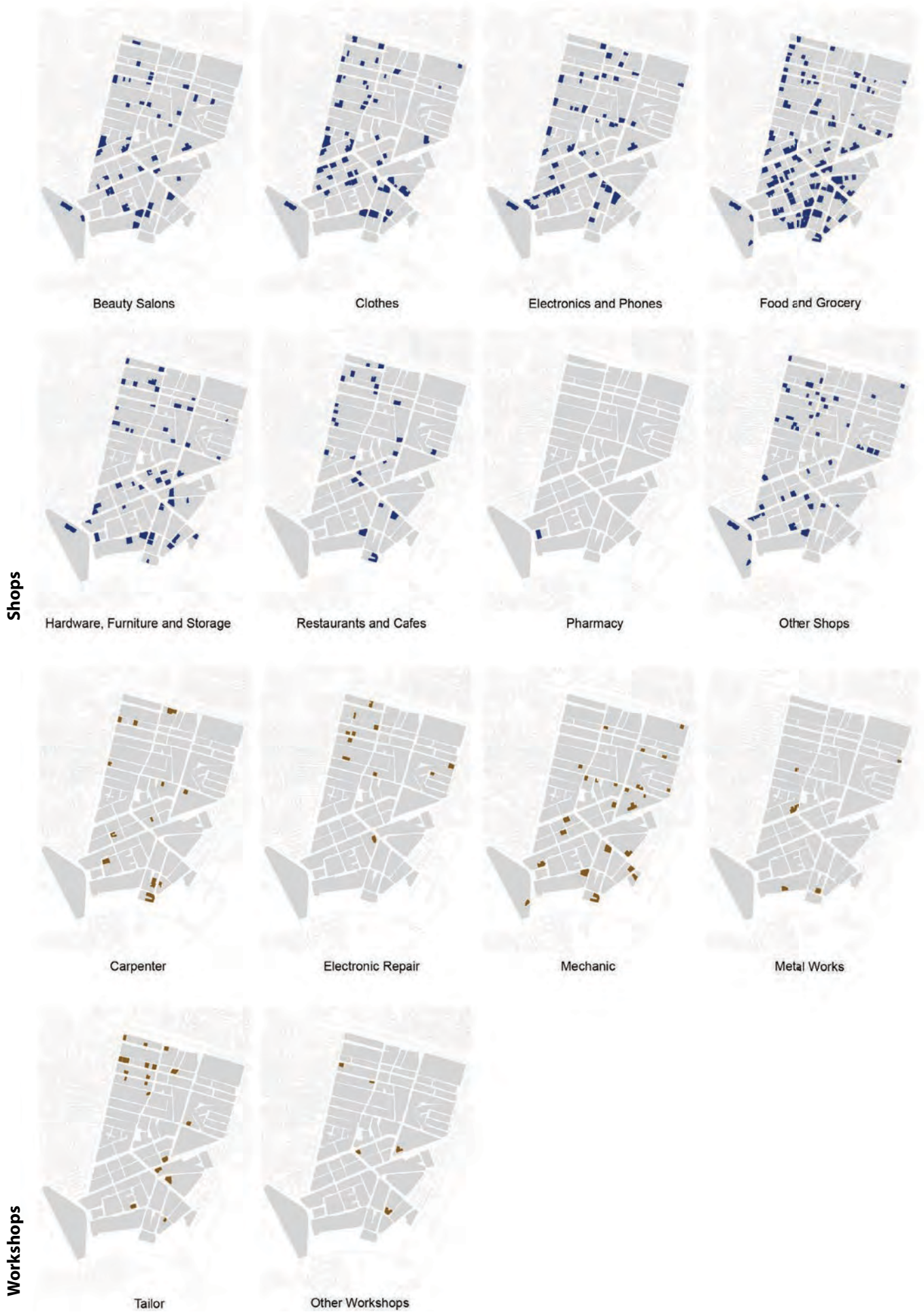
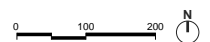


Figure 10 Mapping of shops and workshops



## SPACE USE MAP

Figure 11 shows the location of primary and secondary commercial activities based on surveyed observations relative to gathering spaces and community facilities.

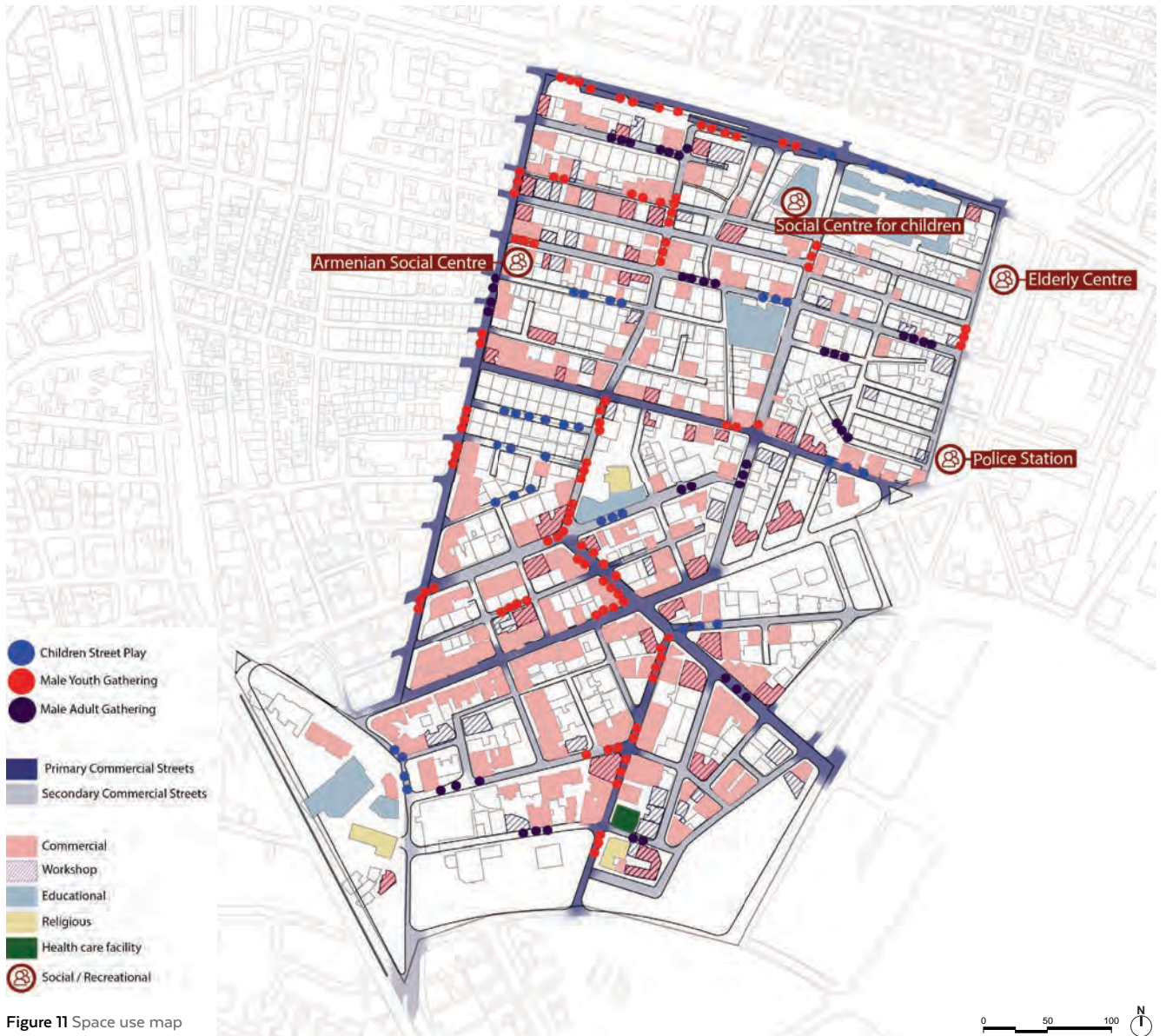


Figure 11 Space use map

## GATHERING SPACES BY GENDER & AGE

Due to the crowded urban fabric and lack of accessible public spaces in Bourj Hammoud and in Nabaa particularly, social gatherings for both children and adults are concentrated in streets, coffee shops sidewalks, mosque squares, and school plazas (See Figure 12).



Figure 12 Gathering spaces

# HOUSING

Nabaa contains 765 low to medium rise multi-storey apartment buildings. Most buildings have 3 to 4 floors, with 21% of them having rooftop add-ons made of various construction materials and often violating building codes and zoning regulations.

A comprehensive external building condition assessment was conducted by UN-Habitat engineers and architects. The inspection focused on:

1. Exterior building conditions: Building envelope; structure, walls, roof, windows and doors, balconies.
2. Communal spaces: Shared spaces of a building including means of exit, entrances, lighting, provisions for people with disabilities.
3. Connection to services: Building connection to infrastructure networks; potable water, stormwater, wastewater, electricity.

Each building feature was categorised into the following rating criteria:

1. Good - Routine maintenance

2. Fair - Minor repair required: Minor repairable problems visible.
3. Substandard - Major repair required: Failure apparent including significant problems.
4. Critical - Urgent repair and/or replacement required: Extensive damage or missing structural elements.

General findings for buildings are:

- 93% were built between 1944 and 1975
- 94% are residential with 38% having a commercial ground floor use
- 39% have a residential ground floor use
- 21% have residential rooftop add-ons housing 719 people
- 56% have major lighting problems with absent or non-functioning lighting fixtures
- 41% have absent or severely damaged entrance gates allowing easy access.

- Many roofs are being used as warehouses for construction materials which is causing serious structural defects.
- Based on the needs identified through the MRR<sup>1</sup>, there are increasing fire accidents in Bourj Hammoud due to poor urban planning where industrial activities take place in residential zones.

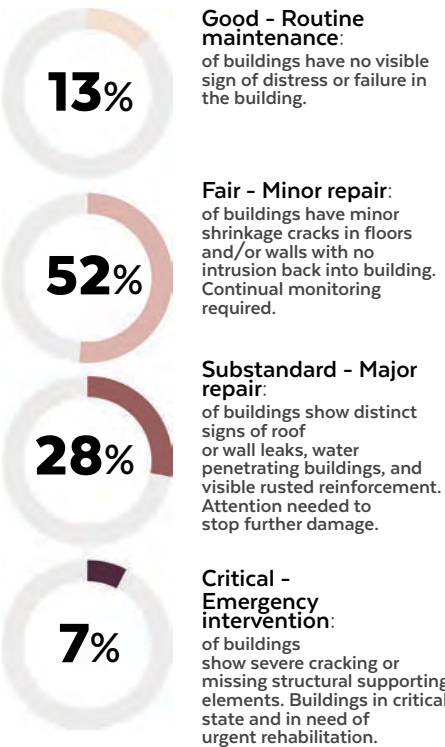
The buildings in the neighbourhood are very homogenous where majority of buildings have a similar typology built in the 1930's-1950. In general, the buildings have no major structural problems, but show visible signs of distress in the form of spalling particularly within balconies. The neighbourhood is situated on a flood prone area, at the banks of Beirut River. The buildings that were classified as of poor condition show considerable damage to major structural elements and at risk of collapse in case of an earthquake.

<sup>1</sup> Ministry of Social Affairs, UNDP, (2015), The Maps of Risks and Resources, Municipality: Bourj Hammoud.

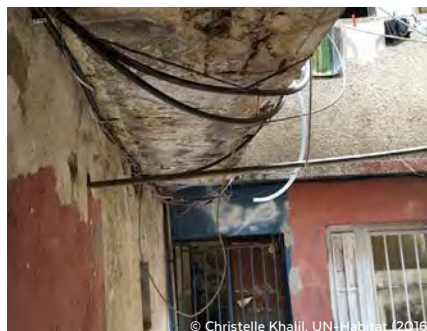
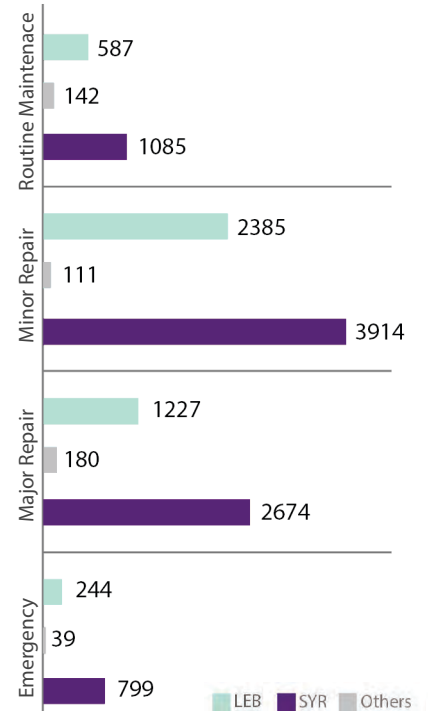
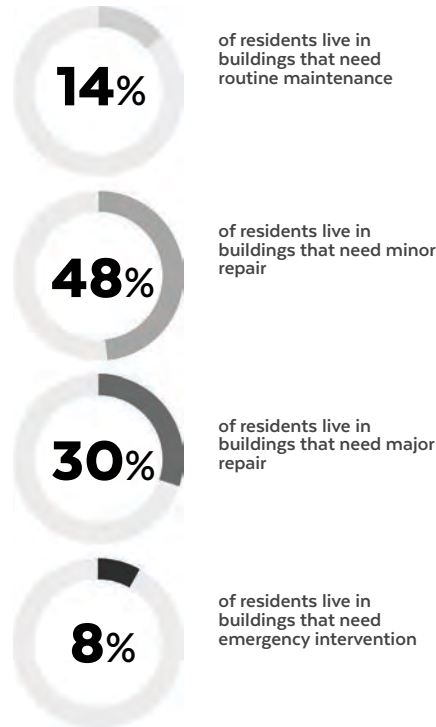
## STRUCTURAL BUILDING CONDITION



BUILDINGS:



RESIDENTS:

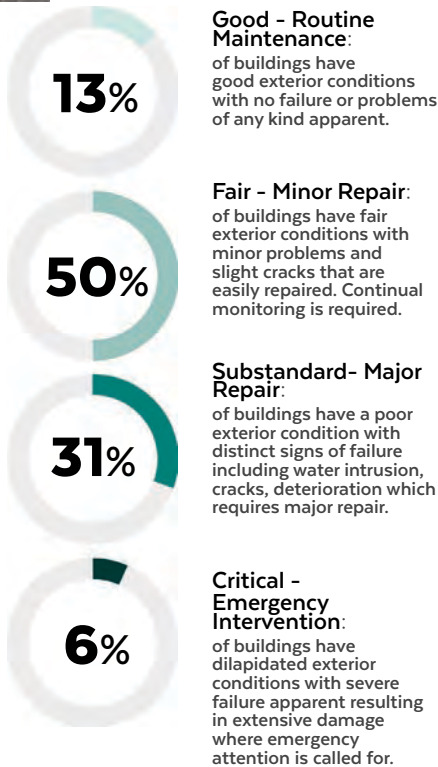


## EXTERIOR BUILDING CONDITION

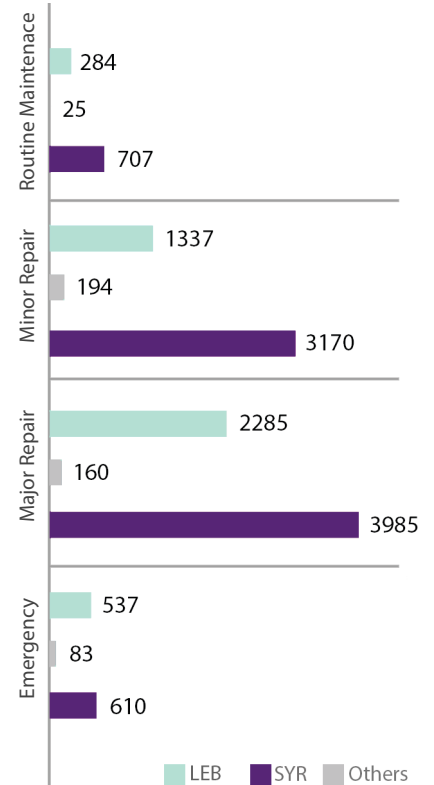
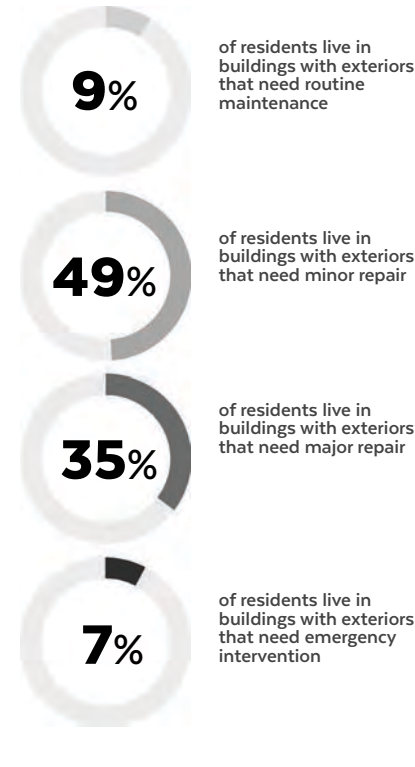
(Exterior walls, roof, windows, balconies, fixed features)



**BUILDINGS:**



**RESIDENTS:**

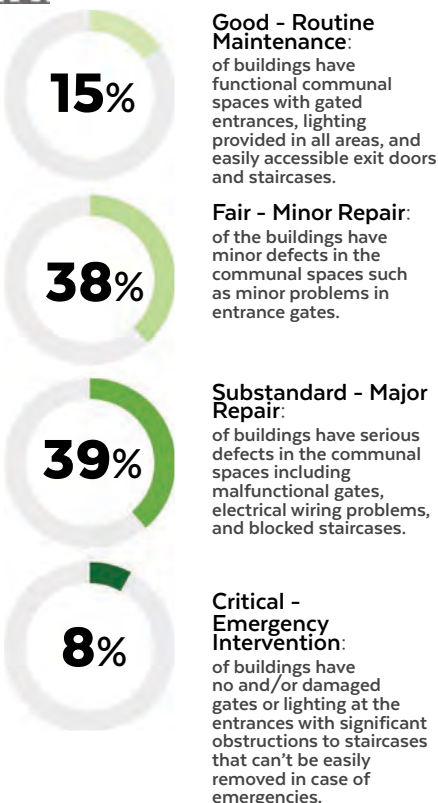


## COMMON BUILDING AREAS

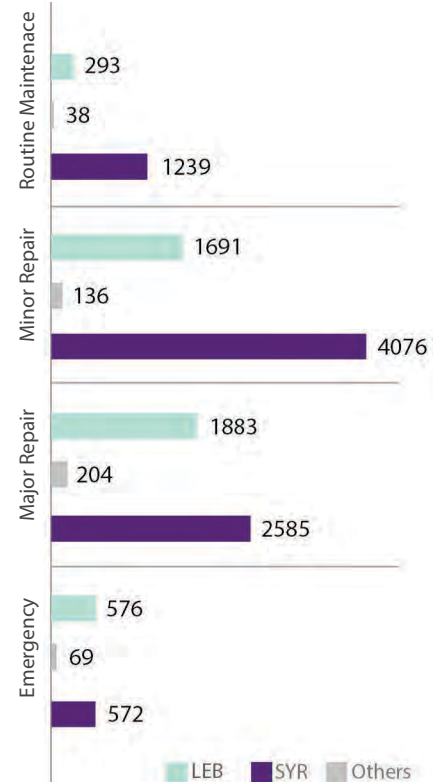
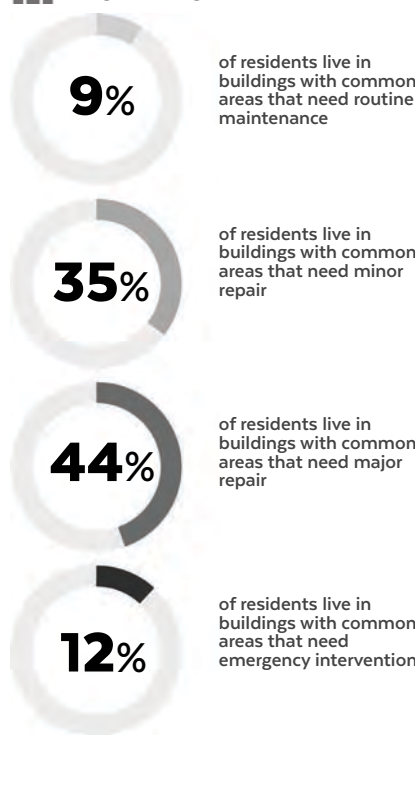
(Means of exit, entrances, lighting, provisions for people with disabilities)



**BUILDINGS:**



**RESIDENTS:**



**Building Material**



Concrete



Concrete with steel additions

\*Concrete structures with steel additions on roofs or balconies.

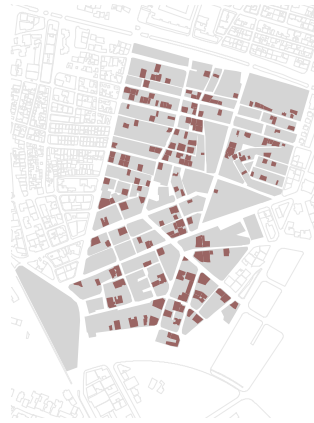
**Structural Condition**



Routine Maintenance



Minor Repair



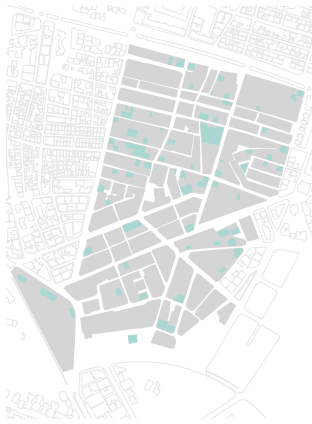
Major Repair



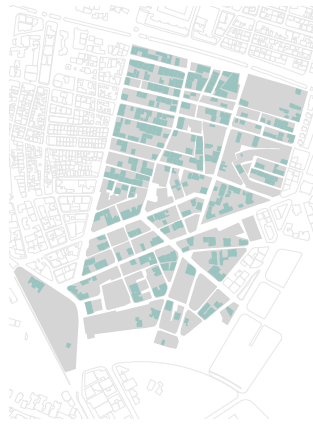
Emergency Intervention

\*Earthquake collapse risk

**Exterior Building Condition**



Routine Maintenance



Minor Repair



Major Repair



Emergency Intervention

**Communal Spaces**



Routine Maintenance



Minor Repair

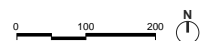


Major Repair



Emergency Intervention

Figure 13 Buildings Condition





## RESIDENTIAL UNIT CONDITION<sup>1</sup>

A targeted household survey based on a sample of 140 households conducted by ACTED in 2015 within Nabaa suggested the following residential unit conditions amongst a selection of vulnerable families.

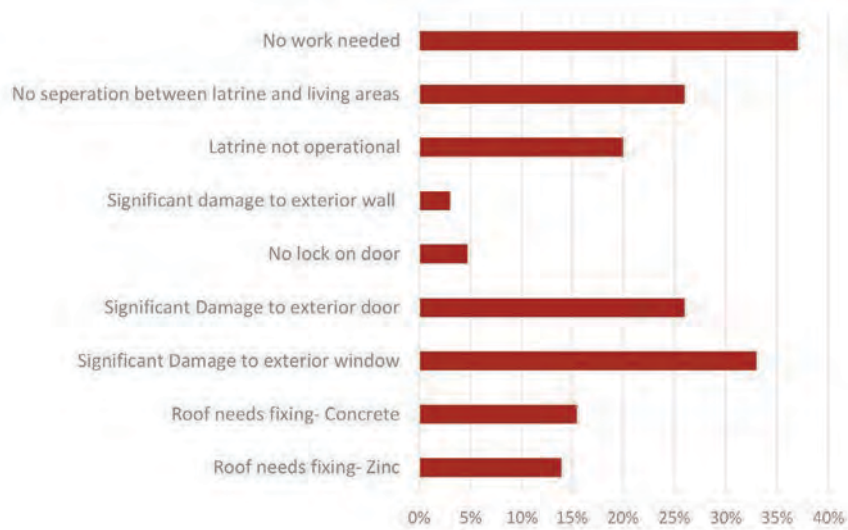


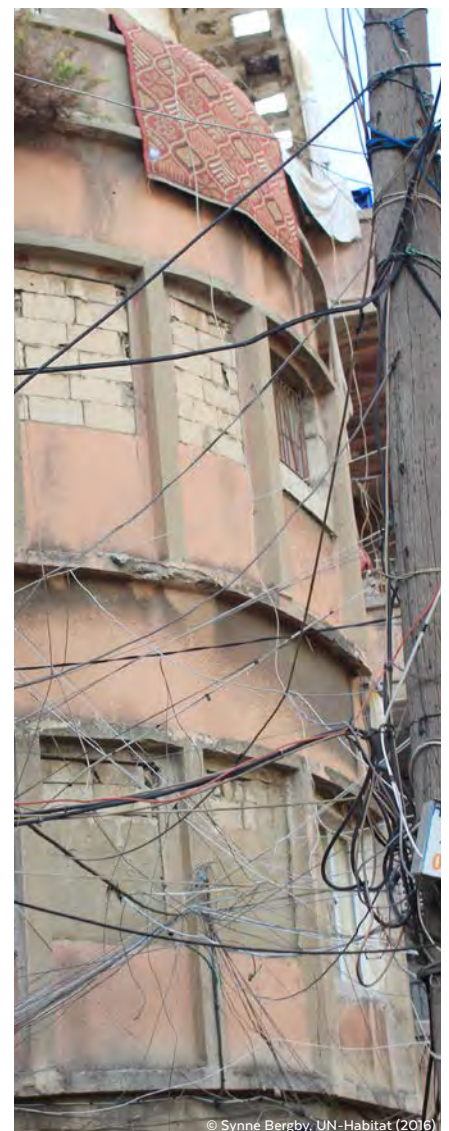
Figure 14 Residential Unit Conditions. Source: Adapted from ACTED (2015) Passports, Farhat Mosque, Nabaa-Lower Metn

## HOUSEHOLD<sup>1</sup>

ACTED conducted a household survey in 2015-2016 for selected poor sub-neighbourhoods within Nabaa including Mar Doumit, Mar Takla, and Al Salib Street. The surveys covered between 68 and 140 vulnerable households of different ethnicities (Lebanese, Syrians, Bangladeshi, Egyptian, Ethiopian and Filipino). The findings show that “the sampled families were living in small one or two room apartments. The majority of the households interviewed (93%) reported that they were renting their apartments (Syrian families are paying

on average 100\$ more in rent than Lebanese); most of these did not have furniture provided as part of their lease (81%). Half of those renting reported having a formal agreement with their landlord, whereas 42% reported that their agreement was informal, or verbal. Of those interviewed, 7% reported that they had no rent agreement with their landlord.”

<sup>1</sup> Adapted from ACTED, (2015), Passports, Farhat Mosque.



# BASIC URBAN SERVICES

## POTABLE WATER

- Domestic water reaches most of the neighbourhood but water is only available two days per week and the piping system is in need of rehabilitation to reduce leakages and water losses.
- Water quality is poor and not suitable for drinking. Based on a household survey conducted by ACTED in 2015, a representative sample showed that most drinking water is contaminated and only used for domestic purposes.
- 85% of buildings have water tanks on the ground floor. This is mainly due to the fact that the pressure of the water supply is too low for it to reach the tanks on the roof.
- Water supply is not uniformly continuous and often fails to meet basic household needs leading to a water shortage most days of the week.
- There is a lack of monitoring of private water suppliers in terms of pricing.
- Water meter are shared between neighbours which is leading to an unfair distribution of water supply.
- There is a lack of water treatment for limescale.

## WASTEWATER

- The wastewater network is overloaded because its pipes also receive stormwater.
- 37% of the sewage network is malfunctioning which is causing environmental risks and health problems among neighbourhood residents.
- During peak discharge, wastewater overflow through manholes is likely caused by solid waste disposed in sewers leading to the blocking of sewage network.
- Clogged wastewater channels are causing bad odours in neighbourhood streets.
- Many badly constructed septic tanks are leaking and connections to the main line are minimal or non-existent.
- The sewage floods are directly affecting most households residing at the ground floor, as well as all the shops/workshops.

## BUILDING CONNECTIONS TO POTABLE WATER NETWORK



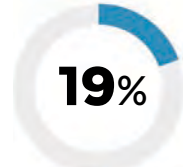
**BUILDINGS:**



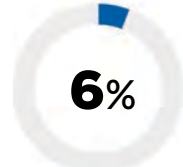
**Functional:**  
of residential buildings are connected to water supply network with good quality pipes and no leakages.



**Malfunctional / connected:**  
of buildings are connected to the water supply network but with minor leakages and/or inappropriate installation of water pumps.



**Serious defect / connected:**  
of buildings are connected to the network but pipes have major leakages and are at the end of their lifecycle.



**Missing / Not connected:**  
of buildings are not connected to water supply network, requires immediate attention



**RESIDENTS:**



of residents live in buildings with a functional potable water network



of residents live in buildings with a malfunctioned yet connected potable water network



of residents live in buildings with serious defected yet connected potable water network

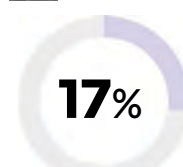


of residents live in buildings with no connection to water supply network

## BUILDING CONNECTIONS TO WASTEWATER NETWORK



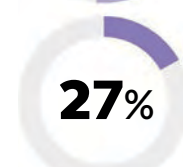
**BUILDINGS:**



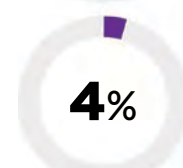
**Functional:**  
of buildings are connected to the wastewater network and plumbing system is properly installed.



**Malfunctional / connected:**  
of buildings are connected to the wastewater network and/or septic tanks with minor leakages in the wastewater plumbing system.



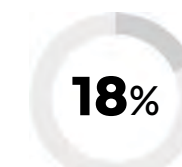
**Serious defect / connected:**  
of buildings are connected to the wastewater network and/or septic tanks with major leakage problems and/or blockages in plumbing system.



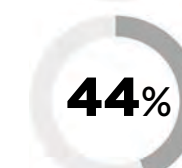
**Missing / Street discharge:**  
of buildings are not connected to a sewer and discharge their waste into open drains on the street.



**RESIDENTS:**



of residents live in buildings with a functional wastewater network



of residents live in buildings with a malfunctioned yet connected wastewater network



of residents live in buildings with serious defects yet connected wastewater network



of residents live in buildings with no access to a wastewater network

## BUILDING CONNECTIONS TO INFRASTRUCTURE NETWORKS

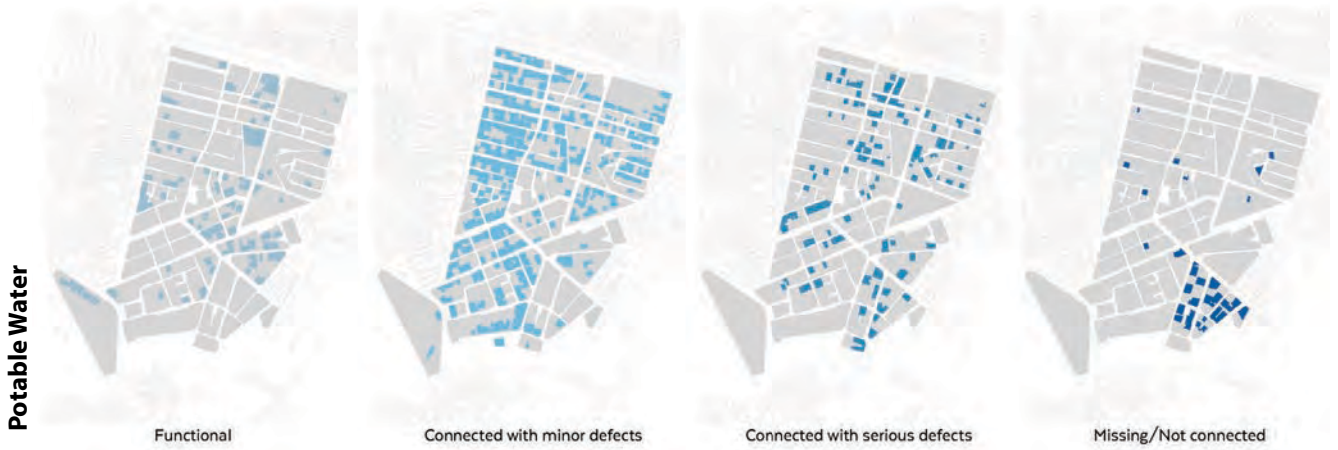
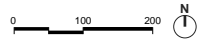


Figure 15 Building connection to potable water network



Figure 16 Building connection to wastewater network



## INFRASTRUCTURE STREET MAPPING

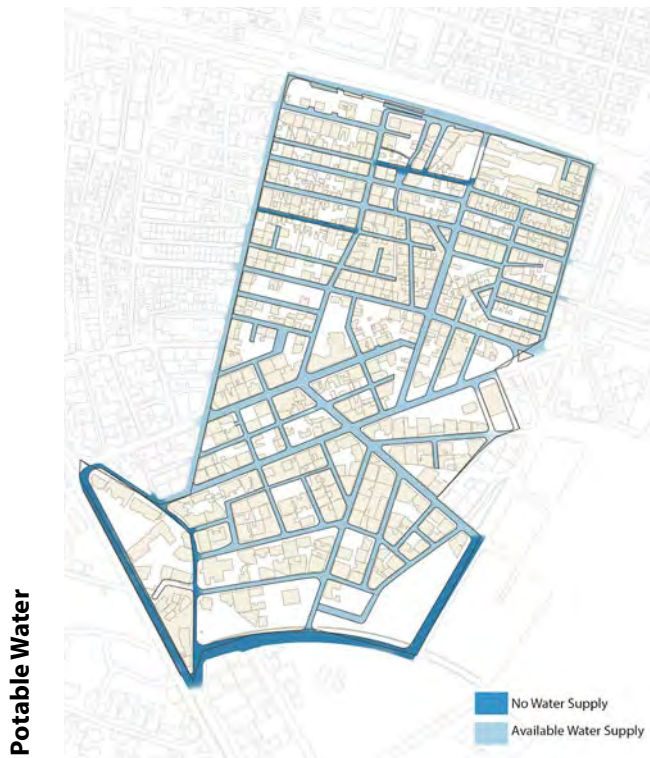


Figure 17 Potable water street mapping



Figure 18 Wastewater street mapping



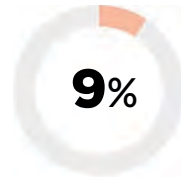
## STORMWATER

- The neighbourhood has very limited permeable surfaces. 83% of the gullies are damaged or not functional at all, contributing to drainage problems including on-street stormwater runoff.
- The stormwater network is combined with the sewage network, which overloads the pipe network and triggers overflow onto streets during heavy rainfall.
- There is poor drainage infrastructure, with around 30% of streets lacking gullies and thus any means of drainage, which causes localised flooding during heavy rainfall.
- Drainage channels are either narrow or partially to completely blocked with solid waste, which is causing flooding in most parts of the neighbourhood.
- Flooding and inadequate drainage of stormwater is causing structural damage to the roads, exacerbated by the abundance of water ponding areas on most streets.
- Flooding is limiting the access to and from residences, and blocking their means of exit in case of emergency.
- Poor drainage is likely to have a significant impact on the prevalence of illnesses among neighbourhood residents and widespread infections.

## BUILDING CONNECTIONS TO STORMWATER NETWORK



BUILDINGS:



**Functional:**  
of buildings are connected to the network. Stormwater pipes are properly installed and functional.



**Malfunctional / street discharge:**  
of buildings are not connected to the network. Stormwater pipes are properly installed on external walls but discharge on street.



**Serious defect / street discharge:**  
of buildings are not connected to the network. Stormwater pipes are installed but have serious defects, leaking and/or blocked, and discharge on street.



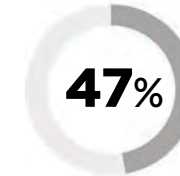
**Missing / Street discharge:**  
of buildings are not connected to the municipal network and/or have missing/blocked stormwater roof gutters or drains. No stormwater pipes installed and rainwater is leaking on external walls.



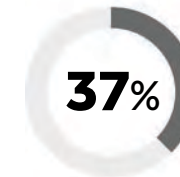
RESIDENTS:



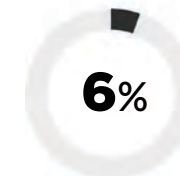
of residents live in buildings with a functional stormwater network



of residents live in buildings with a malfunctioned yet connected stormwater network



of residents live in buildings with serious defect yet connected stormwater network



of residents live in buildings with no access to a stormwater network

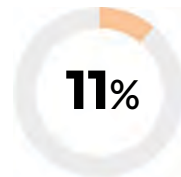
## ELECTRICITY

- Electric infrastructure is often dilapidated and dangerous. Electric hazards and tangled overhead wires are very common.
- Electricity supply is inadequate to meet residents' demands with around 60% of the neighbourhood receiving 8 - 10 hours of electricity per day.
- Residents depend on privately owned power generators to meet their daily energy needs. The monthly charge for generator subscription varies from \$50 to \$75 for 5 Amperes.
- The use of power generators is not regulated. They contribute significantly to air and noise pollution.
- Illegal electricity connections are common causing burdens on the already overloaded network and constituting fire hazards.
- Street lights are non-functional when the main power is down.
- Some practices for water heating are dangerous, constituting electrocution hazards.
- Widespread electrical hazards due to the tangled overhead wires present a risk in the streets.

## BUILDING CONNECTIONS TO ELECTRIC GRID



BUILDINGS:



**Functional:**  
of buildings are connected with electric wires properly installed.



**Malfunctional / connected:**  
of buildings are connected, but have minor defects in their connection to the electrical grid, electric wires are installed externally with limited safety measures and weatherproofing.



**Serious defect / connected:**  
of buildings are connected, but have inadequate connections to the electrical grid, with electric wires causing danger to building residents.



**Missing / Not connected:**  
of buildings are not connected to the electrical grid.



RESIDENTS:



of residents live in buildings with a functional connection to electric grid



of residents live in buildings with a malfunctioned yet connected electric grid



of residents live in buildings with serious defect yet connected electric grid



of residents live in buildings that are not connected to the electrical grid

## BUILDING CONNECTIONS TO INFRASTRUCTURE NETWORKS



Figure 19 Building connection to stormwater network



Figure 20 Building connection to electricity network

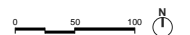
## INFRASTRUCTURE STREET MAPPING



Figure 21 Stormwater street mapping



Figure 22 Electricity street mapping





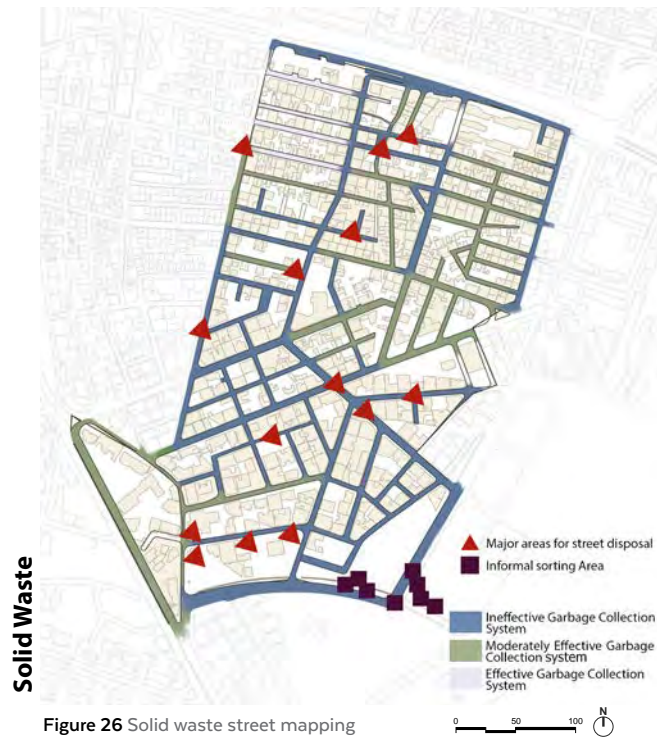
**Figure 23** Street lighting mapping  
 \*This map is representative only when public electricity is available. When the power is down, the area is completely dark.



**Figure 24** Sidewalk condition mapping  
 \*Sidewalks are blocked by people for private parking or by shops outspreading their merchandise.



**Figure 25** Road condition mapping



**Figure 26** Solid waste street mapping

## SOLID WASTE

Solid waste is collected on a daily basis by the municipality. However, there are no garbage bins in the whole neighbourhood. Solid waste is thrown onto the streets (especially in backyards and tertiary streets), which is leading to remains of trash, smells and rodents throughout the neighbourhood.

- There is a lack of awareness and mean littering habits amongst some residents.
- There is a widespread absence of garbage bins in the streets.
- Some residents refuse to place municipal garbage bins in front of their homes.
- There is rampant dumping of waste on empty plots/lots, leading to informal dumpsites, environmental degradation, attraction of pests, with a potential risk of spread of diseases.
- There is a lack of law enforcement regarding fines for solid waste violations.
- Informal sorting areas are present on the outskirts of the neighbourhood.



© Dani Harake, UN-Habitat (2016)

# INFRASTRUCTURE PERFORMANCE

The measures used to determine infrastructure performance are the three broad dimensions of condition, provision and coverage. These categories are evaluated based on a scoring criteria weighted to reflect their relative importance. The scoring criteria is the following: very poor (0-0.49), poor (0.49-0.69), fair (0.69-0.79), good (0.79-0.89), and very good (0.89-1).

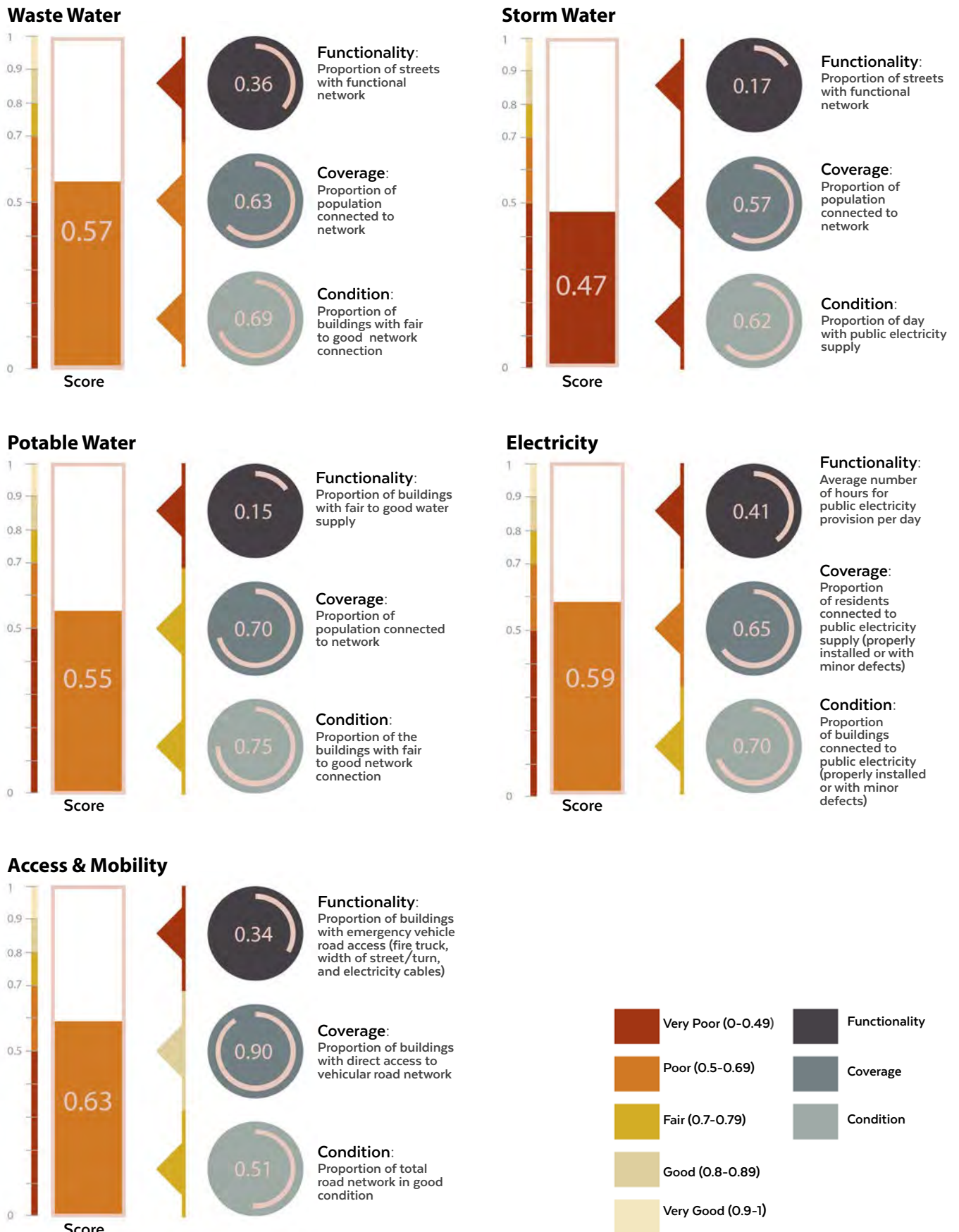


Figure 27 Infrastructure performance

## SUMMARY OF KEY FINDINGS

- This diagnostic profile has identified a range of issues relating to the physical built environment and the use of the built environment that are anticipated to be of interest to humanitarian and development entities, local authorities and public service providers, the private sector and local communities. The evidence base provided offers an entry point for further work towards relative prioritisation of interventions by sector and by area as well as, critically, a spatial basis for fostering coordinated action amongst the abovementioned actors.

- Amongst the 14,760 population of Nabaa, almost two-thirds are Syrian refugees, and a third Lebanese. The survey has quantified the extent to which high densities at the residential unit level disproportionately affects Syrian refugees relative to host community residents. Syrians constitute the overwhelming majority of residents in units accommodating 6 or more individuals; indeed, 25% of Syrian refugees live in units holding nine or more people. Whilst internal space per person metrics have not been determined, it is fair to suggest that overcrowding with its associated health and protection implications applies in Nabaa.

- Tenure rights as well as in-practice security of tenure, and variations in these between host and refugee residents, remains a gap in current understanding.

- Against this high density living situation in the private realm, the lack of open spaces in the public realm, particularly for females and for children to play safely, is all the more critical. Approaches to mitigating this deficit must address

contextual challenges reported, including the significant incidence of gang gatherings, harassment of females in public spaces, feelings of insecurity particularly at night, intra-cohort and sectarian tensions including sporadic outbreaks of fighting and the limited application of law enforcement.

- In terms of residential building structural quality, whilst 65% of the neighbourhood's 765 buildings were found to be in fair to good structural condition, it remains that 38% of residents (5,163 people) occupy buildings of substandard or indeed critical structural conditions. Of these, 67% are Syrian refugees. Recalling that 63% of the population are Syrian refugees, this suggests that occupation of buildings of substandard or critical structural conditions affects both refugee and host communities fairly proportionately. Currently, the relationship between the quality of buildings in terms of structural soundness and other measures of condition on one hand, and, on the other, financial affordability, remains to be probed. This is particularly in terms of the in-principle implications of any housing and shelter amelioration interventions for access to housing amongst the most vulnerable. For buildings of critical structural condition, mechanisms for the proper application of existing building code protocols involving the relevant competent authorities and property owners may need clarification.

- The logging of infrastructure connections to residential units by service has indicated the distribution of associated stresses as sources of vulnerability. A third of residents (4,870

individuals) were found to live in buildings with seriously defective wastewater systems despite being connected to the network, and a further 5% occupy buildings with no connection at all. These are spatially distributed throughout the area. Similarly, 10% of residents (1,476) are in accommodation that does not offer a potable water network connection, these being overwhelmingly concentrated in one pocket at the south-east extent of the neighbourhood.

- Of the economic premises in Nabaa, 83% are shops or restaurants/cafes. The remaining 17% are workshops. The extent to which residents are economically active outside the neighbourhood or indeed from homes within is unknown. With 82% of premises occupied through renting and 47% of businesses having been established within the last five years, it is not currently clear whether this high turnover is a longstanding pattern in the neighbourhood, or if the new businesses have been established in response to various dynamics of the post-2011 influx. Significant surveyor observation of incidences of child labour in the premises, combined with the reportedly high rates of school drop-outs as well as of youth unemployment are factors to be taken into account in any wider action-orientated consideration of employment and labour markets in the neighbourhood.



© Riham Kuwatli, UN-Habitat (2016)



A photograph of a multi-story tenement building with balconies, satellite dishes, and laundry hanging out to dry. The building has a weathered, light-colored facade. Several balconies are visible, each with a metal railing. Laundry, including towels, sheets, and clothes, is hanging from lines and railings across the balconies. Several satellite dishes are mounted on the balconies and roof. The overall scene depicts a densely populated, urban environment.

# PART 2. NEIGHBOURHOOD STRATEGY



# GOVERNANCE

Nabaa neighbourhood is located in Bourj Hammoud municipality. It is negatively impacted by limitations in the municipality's capacity and skills regarding provision of adequate infrastructure and basic urban services to its residents.

The majority of Nabaa's population now comprises refugees, and many Lebanese residents are registered to locations outside the neighbourhood for voting purposes. Neither group therefore participates in local municipal elections, creating a democratic deficit of a relatively intractable nature.

However, there is potential for improving governance for all in the neighbourhood through enhancing the financial and operational capacity of the municipality, and through neighbourhood engagement structures that respond to urban and social service needs, with the support of the municipality and in coordination with international and local NGOs, development actors and other stakeholders.



© Riham Kuwatli, UN-Habitat (2016)



Bourj Hammoud & Sin El Fil NGO forum © UN-Habitat (2017)



Local representatives meeting © UN-Habitat (2017)

## ■ IMMEDIATE RESPONSE 6 months

- Establish a Regional Technical Office (RTO) under the mandate of the Union of Municipalities (UoM) comprising local experts and technical persons aiming at mobilising public and civil local actors, to address local needs collectively based on available resources. The RTO aims to strengthen local governance, enhance service delivery, and mainstream planned interventions.
- Establish a mechanism for regular coordination between the UoM, Bourj Hammoud Municipality, development agencies and Social Development Centres (SDCs).
- Leverage the municipality to establish a neighbourhood local committee (that builds on the local representatives group organised by UN-Habitat) and addresses its existing challenges and emerging needs through drawing on representative inputs from the resident population.
- Address perceptions amongst Nabaa's residents of marginalisation by Bourj Hammoud Municipality by establishing a coordination mechanism between the municipality and the local representatives group.

## ■ SHORT TERM RESPONSE 12 months

- Strengthen the presence of municipal police administering their roles (particularly addressing safety and security issues pertaining to women, children and youth).
- Establish a youth council with gender and age representation (age 15 -25) which facilitates organising recreational and awareness events that fosters social stability and inclusion.
- Strengthen committees within Bourj Hammoud Municipality by building their capacities to assess, regulate or monitor social and economic-related practices.
- Leverage the RTO to develop a work plan based on the Neighbourhood Strategy that will specify a sequence of steps and interdependencies with cost and timeframes to complete works. Reach agreement between the municipality and stakeholders, through a participatory approach with the community, on work plan priorities with actions required by all to ensure implementation.
- Empower the RTO to coordinate and communicate between different active stakeholders to identify needs and gaps of any planned interventions, some of which may fall outside the existing scope of work.

## ■ MID TERM RESPONSE 2 years

- Sustain the capacity of the municipality and RTO to audit and monitor local needs, through a participatory approach.

# MAIN SPATIAL STRATEGIES



## Main Social Stability Strategies

- Main Commercial Activity
- Potential Safe Space
- Main Children Gathering Area
- Under-bridge Potential Public Space
- Main Neighbourhood Entrance
- ↔ Neighbourhood Connectivity
- 📍 Landmarks

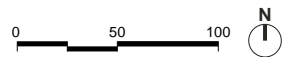
## On-going Project

- 1 Public Garden (UN-Habitat)
- 2 Municipal Garden (UNDP)
- 3 Communal Space (ACTED)

## Main Urban Upgrading Strategies

- Storm/Waste Water Network
- Deteriorated Road
- Unlit Road
- Buildings with Poorest Structural/Exterior and Common Area Conditions
- Buildings with No to Very Poor Connection to Infrastructure Services (Electricity, Waste, Storm and Potable Water)
- Prototype Street
- Dumping Site

Figure 28 Main strategies to mitigate vulnerabilities among Nabaa residents



# SOCIAL STABILITY

Historically, Nabaa has been home to multiple nationalities starting with the Lebanese, Armenians and Arabs to present-day Syrian, Palestinian and Southeast Asian economic migrants and refugees. Its economic strengths relate to its geographical proximity to central Beirut and low-cost rental prices.

The Nabaa Neighbourhood Profile [NP] (UN-Habitat, 2016) population survey revealed that 63% of residents are Syrian refugees, living on average at 5.3 people/residential unit, while 33% are Lebanese, living at residential unit densities of 3.5 people on average. The remaining 4% are of various nationalities including PRL, PRS, Filipino, Sri Lankans, Indians and Bangladeshis. Demographic analysis show that Nabaa has transformed from a host community neighbourhood into a majority refugee one, with some streets inhabited completely by Syrian families. The local representatives group reported that the common skills profile shared between Syrian refugees and the host community may be giving rise to social tensions which can be observed throughout Nabaa.

The proposed community development process aims at reinforcing social stability, enabling access to livelihoods, empowering women and youth, protecting children, and mobilising the community to take collective action on - and generate solutions to - shared social and economic problems for community wellbeing.



# SAFETY & SECURITY

Social tensions in Nabaa's multi-national community have been observed and reported on during focus groups discussions. **Safety and security** concerns include informal security networks, pressure of street gangs, drug and alcohol abuse amongst youth, lack of accessible safe spaces and common harassment of women and girls. A study on Housing Land and Property Issues in Lebanon<sup>1</sup> (UN-Habitat, 2014) identified satisfaction amongst long-term residents about the fall in the number of single male residents linked to the post-2011 Syrian refugee influx, citing lower incidences of street violence and a healthier neighbourhood life. The tightly-knit social network amongst Syrian refugees has been reported as an important security net for that cohort. The predominantly family-orientated nature of the neighbourhood may now be capitalised on as a major asset for promoting social cohesion.

Reinforcing social stability within Nabaa requires:

Developing mechanisms for strengthening communities; addressing physical and non-physical obstacles to social integration and inclusion; promoting participation in social, cultural and political life regardless of nationality, gender and age and in accordance with Lebanese law; accessing safe spaces and enhancing social interaction through dialogue between refugees and host communities within the neighbourhood and with its surroundings.



Figure 29 Open spaces around Nabaa

- |   |   |
|---|---|
| (1) Vacant lot  | (5) Kids garden                                 |
| (2) Homentment Stadium  | (6) Municipal Garden (UNDP)                     |
| (3) Bourj Hammoud Stadium   | (7) Saydeh public garden                        |
| (4) Public sport field  | (8) Public garden                               |
| <span style="color: green;">■</span> Open spaces  | <span style="color: blue;">■</span> Sport field |
| <span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px;"></span> Potential safe space |   |

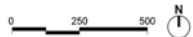


Figure 30 Potential spaces within Nabaa

- |                                       |
|---------------------------------------|
| (1) Public space project (UN Habitat) |
| (2) Communal space project (ACTED)    |
| (3) Water tower space                 |
| (4) Private vacant lots               |



## IMMEDIATE RESPONSE 6 months

- Enhance communication between the municipality, neighbourhood committee and existing local governance actors (especially political parties) to discuss problems and opportunities pertaining to social cohesion within the neighbourhood.
- Build the municipality's capacity to establish a system that enables community involvement in decision-making (eg focus groups discussions) to address social stability challenges and solutions within a participatory approach.
- Address issues related to insecure zones specifically highlighted by crime or social tensions (e.g. narrow alleys, unlit areas). (See Section 3 Urban Upgrading)
- Raise awareness of the need for safe and accessible streets where harassment (of females) is addressed through community campaigns and activities. (See Urban Upgrading section)
- Raise awareness of the role and duties of municipal police role in respect of community stakeholders and social service providers.
- Establish regular night patrols to mitigate safety and security risks.
- Create a community place for social meetings and events (eg abandoned fenced land (4). (See Figure 2)

## SHORT TERM RESPONSE 12 months

- Develop a strategy to create a network of open safe spaces and green areas including the potentially available open spaces around Nabaa. (See Figure 1)
- Engage children and youth in street sports and recreational events that promote inclusive activities and the activation of public spaces (2). (See Figure 1)
- Increase access to safe communal spaces for women, men, girls and boys (eg create pocket space playgrounds for children) through locally relevant materials and labour practices with added features of an environment-friendly design.
- Help mitigate social tension within households and increase social integration within Nabaa community in existing public spaces (2) or outside Nabaa (as suggested by women focus groups). Build on the dominant cohousing residency pattern and social fabric of Nabaa by organising family-oriented recreational activities and awareness-raising campaigns for Syrian and Lebanese families. (See Figure 1)

<sup>1</sup> UN-Habitat Lebanon. (2014). Housing Land and Property Issues in Lebanon.



Example of pocket space - © UN Habitat (2017)

## MID TERM RESPONSE 2 years

- Institutionalise a collaborative system between the municipality, neighbourhood committee, youth council and local residents to support sustainable social stability frameworks that address social, political and economic equality.
- Create a community centre (eg Mar Takla School 300m2 open land) which can host diverse events and be utilised as an awareness-raising space for schools and NGOs. Implement children and youth initiatives (summer camps, artistic activities, sport initiatives etc.) to promote participation and sponsorship of youth in the community.
- Establish an analysis and reporting system within the municipality's (RTO) to monitor early warning signals and mainstream conflict sensitivity amongst partners so as to maintain services.

## LOCAL ECONOMY

Nabaa holds a multinational community with various production and technical skills (eg tailoring, carpentry, mechanics etc.) and a local market that is considered cheaper than others in Bourj Hammoud and Beirut. In the post-2011 context, livelihoods in Nabaa are now more vulnerable given the neighbourhood's already low socio-economic status and increased density over this period. The commercial land use survey in the Nabaa Neighborhood Profile (UN-Habitat, 2016) indicates that its market is based on retail goods and services (83%) by number of premises, with the single largest sector being food and groceries (30% of retail goods and services premises); production and services workshops (17%), with the single largest sector being mechanics (30% of production and services workshops). Enabling livelihood protection and improving livelihood promotion is likely to be critical to elevating the socio-economic status amongst residents.

Strengthening the **local market and livelihood** opportunities includes:

Sustaining existing market streets; building entrepreneurial behavior among women and youth; addressing existing barriers to accessing market streets; as well as encouraging market consumer participation. Enhancing local development and income-generating opportunities can in turn help reduce unemployment rates and protect vulnerable people, particularly youth and women.

### LOCAL MARKET

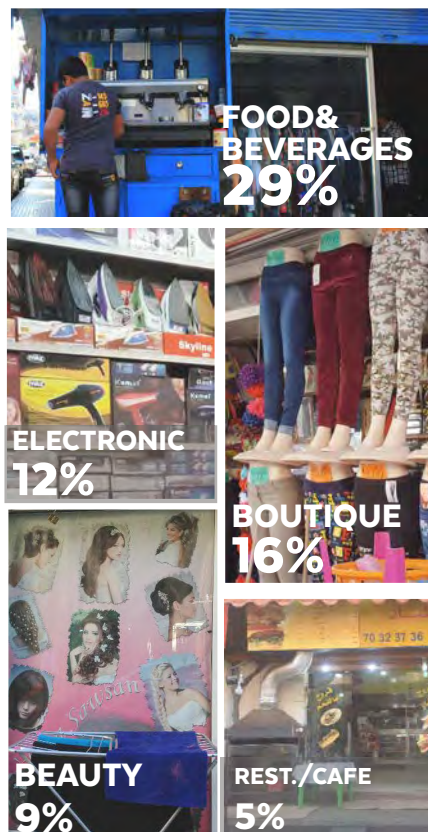


Figure 31 Nabaa's major consumer goods enterprises

## IMMEDIATE RESPONSE 6 months

- Leverage Bourj Hammoud Municipality to establish retail rules and regulations for all merchants (uniform rent strategies, signage etc.).

## SHORT TERM RESPONSE 12 months

- Address infrastructure assets (See Section 3 Urban Upgrading) influencing enterprise activity and profit-making to support local development and promote inclusive growth.
- Develop a support system for renewable energy provision for workshops not able to operate due to electricity cuts and high generator prices.
- Build the capacity of (major) consumer goods enterprises (see Figure 3) with retail best practices (marketing, food safety, quality control, accounting and technical skills) to maximise consumer experience and sales uplifts skills.
- Connect business support and training centre(s) to help merchants according to their business' needs: noting that 47% businesses are new, 20% established and 33% mature (UN-Habitat 2016).

## MID TERM RESPONSE 2 years

- Establish joint ventures between local artisans (see Figure 3) and major actors/corporate industrial enterprises in the local market for exchanging knowledge and expertise, outsourcing selected manufacturing work and recruiting the trained youth apprentices.
- Relocate production workshops (eg mechanics, carpenters etc.) which generate negative public health impacts within residential Nabaa to more suitable areas, ideally with better service provision, where they can also better undertake marketing activities (as suggested by the local representatives group).

## LIVELIHOODS



Figure 32 Nabaa's major workshop types

### IMMEDIATE RESPONSE 6 months

- Conduct an analysis focused on the capacities and employability of vulnerable youth, obstacles facing each or major sectors, market opportunities and recreational needs within the neighbourhood to derive context-sensitive economic empowerment interventions.

### SHORT TERM RESPONSE 12 months

- Train youth in business management entry level basics including training tools such as; marketing, working conditions, accounting, procurement support. Orientate entrepreneurship to business sectors with potential to grow in response to local demand adopting approaches that position them well within the value chain.
- Establish apprentice opportunities between local artisans within Nabaa and local youth seeking vocational training.

### MID TERM RESPONSE 2 years

- Build women's participation within professional vocations and encourage their involvement in the local economy. For instance, support innovative business ventures as well as existing ones such as boutiques (which make up 14% of commercial premises), beauty salons (9%) and tailor workshops (4%).
- Connect unemployed women and youth to international/local organisations for volunteer and social work opportunities.

## A PROTECTIVE ENVIRONMENT FOR CHILDREN

The over-densification of the low-income, family-based and multi-cultural Nabaa neighbourhood generates **child protection** risks. Empowering key actors from the municipality and police to be more active in administering laws is important, as is engaging the participation of vulnerable families to address child protection issues such as education, labour, violence, abuse and exploitation in the public and households.



### IMMEDIATE RESPONSE 6 months

- Assess threats to the safety of children's environments by further studying their social well-being and access to social services (health & education) within Bourj Hammoud and the surrounding area.
- Build capacity of the municipality's social services committee to ensure advocacy for child protection is established.
- Strengthen the relationship between the neighbourhood committee and Social Development Centres (SDCs) to ensure advocacy for child protection principles are present at all levels and jointly plan related interventions.

### SHORT TERM RESPONSE 12 months

- Conduct door-to-door campaigns, school activities and/or community events for caregivers/educators to raise awareness on child education and labour, best practices and global standards in child protection (eg movie-making workshop, puppet show production, parent-child events).
- Enhance access to public spaces through designing safe pedestrian crossings, increasing advertising and organising events which engage Nabaa community. (See Figures 2 & 3)
- Establish better coordination between schools' administrations and municipal police to instigate a municipal police guard for each school who would help mitigate social tensions and circulation problems mainly after school time. This will contribute to a safe school environment.

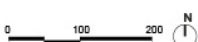






Figure 33 Schools within Nabaa

- |                              |                                   |
|------------------------------|-----------------------------------|
| (1) Soeurs du Rosaire School | (5) Al Muwatan School             |
| (2) Mar Takla School         | (6) Al Tarakki School             |
| (3) Al Ahlieh School         | (7) Bourj Hammoud Public School 2 |
| (4) Al Sharki Siryen School  |                                   |

## MID TERM RESPONSE 2 years

- Address risks to child health, safety and security such as overhead electric wires, poor wastewater and solid waste management etc. (See Section 3 Urban Upgrading).
- Tackle children’s common activity of spending leisure time playing in streets in terms of protection and safety risks. Create safe spaces that provide children with inclusive activities and support their social learning. Given constraints on creating playgrounds or finding public spaces in Nabaa; potential multi-use safe spaces options could include:
  - A multi-themed space-efficient playground or play structure on municipal land or on an abandoned lot.
  - Low maintenance recreational activities organised by NGOs at school playgrounds in afternoons/weekends with free entrance. (See Figure 6)
  - Sport competitions/tournaments between schools at their playgrounds.
  - Pocket playgrounds with alternative uses for horizontal and vertical surfaces, located at left-over spaces surrounded by mainly pedestrian rights of way.
  - Floor-marked themed games at tertiary roads with low to no vehicular access.
  - Awareness murals promoting a child-friendly environment.
- Assess feasibility and establish a multipurpose common space (eg proposed Mar Takla open land as a cultural centre) for children to play and develop skills necessary for well-being and social interaction.

# GENDER EQUALITY

The main issues reported by women and girls in Nabaa are their limited access to the job market, as well as to participation in decision making, and their personal safety and security in public spaces in a context of space appropriate by males and by dominant gangs. Furthermore, an (implicit) social tension between Lebanese and Syrian women was reported. Women play a crucial role in caring for, sustaining and rebuilding their communities. To achieve **gender equality**, the empowerment of all women and girls and enforcement of their human rights must be upheld at all levels of government in processes that integrate their participation.



Example of bazar © UN Habitat (2016)



© Elie Mansour, UN-Habitat (2016)



Abandoned water tower-Potential exhibition space & garden © Elie Mansour, UN-Habitat (2017)

## IMMEDIATE RESPONSE 6 months

- Strengthen women’s decision making by ensuring their representation within local authorities acting in Nabaa.
- Promote attitudes and practices which are empowering and protective of women through conducting capacity building trainings and awareness-raising sessions with the community.
- Integrate gender equality through establishing and implementing monitoring of women protection issues in collaboration with the municipality and interested stakeholders.

## SHORT TERM RESPONSE 12 months

- Establish mechanisms for strengthening social stability, promoting co-existence and enhancing social interaction by building on social collectors - events or community processes that bring the different parts of communities together (eg recreational and awareness events such as female community choir, Arab cultural festival, trips outside Nabaa etc. as suggested in women focus groups).
- Mitigate safety issues impeding women and girls from leaving the house (ie well lit streets, safe communal spaces).
- Provide basic business skills and training including accounting, small business set-up, procurement etc. to jobless women, promote their entry to the labour market (e.g. food processing project), and connect them to (I)NGOs active within Nabaa (eg volunteer and social work)
- Support skilled women to exhibit/sell their artisan crafts, organic products etc. in bazars in Bourj Hammoud area or by creating an exhibition space (eg rehabilitating the abandoned water tower,)

# YOUTH EMPOWERMENT

High rates of unemployed youth with low completion of school and higher education learning are reported in dense low income Nabaa given scarcity and competition on job opportunities. In addition, alcohol and substance abuse was stated during focus groups and local representatives group meetings to be common and visible due to the neighbourhood's density. **Young females and males** in Nabaa are to be addressed as change agents by enabling their civic, economic and social participation at individual and organisational levels, through addressing their skills development, access to resources, critical awareness, and leadership skills.

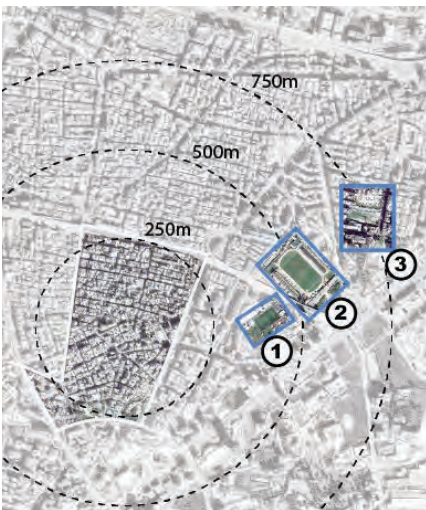
Addressing existing juvenile delinquency, drug and alcohol abuse, and social conflicts can be achieved by promoting early intervention and prevention, highlighting youth's active role within society, provision of educational and economic opportunities, facilitating peace-building projects, awareness-raising, and active reporting and monitoring. The involvement of youth in participatory decision-making and development processes is vital to achieving sustainable development.



Example of mini basketball playground



Example of mini football playground



**Figure 34** Sports fields outside Nabaa  
 (1) Bourj Hammoud Municipality football field  
 (2) Public sport field  
 (3) Homentment Basketball Field

## IMMEDIATE RESPONSE 6 months

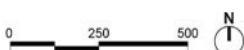
- Establish a youth council comprising of elected youth aged 15-25 to represent the views of young people in their area to the Neighbourhood Committee, local authorities and organisations.
- Conduct a study on youth capacity and skills in comparison to local market need so as to inform capacity building themes needed.

## SHORT TERM RESPONSE 12 months

- Strengthen Municipality to develop out-reach programs to include youth participation in the development and roll out of local programs (eg collaborate with the youth council to organise awareness events targeting caregivers, schools etc.).
- Establish mechanisms for strengthening social stability, promoting co-existence and enhancing social interaction. Organise youth training events or initiatives on engaged citizenship, effective leadership and successful problem-solving.
- Bringing youth together in recreational and peace building activities (eg drama therapy workshops, youth entrepreneurs' competition, art workshops/events, music club or choir etc.).
- Foster youth initiatives such as sports tournaments for local youth to engage in sportsmanship at the nearby sport fields. Activate Bourj Hammoud Municipal Football Field to host the events. (See Figure 7)
- Train female and male youth to be playmakers by which they can coach and manage sport competitions.
- Identify and design mini sport courts (eg a half basketball court or a mini-football pitch) in potential spaces, after liaising about land tenure with the municipality.

## MID TERM RESPONSE 2 years

- Assess and support the capacity of the Social Development Centres to address and respond to drug abuse.
- Train youth council to set up and administer summer play camps for younger youth/ children focused on enhancing their drive to become community ambassadors, leadership skills, and civic engagement and fostering gender equality and social inclusion.



# URBAN UPGRADING

Urban upgrading aims at stabilising deteriorating conditions and improving living conditions in partnership with the local authorities, community and other stakeholders. The strategy focuses on local connectivity and improvement of potable water, storm water, wastewater, electricity and solid waste management to existing larger-scale networks and systems. Proposed works take into account phasing of interventions, where primary and secondary networking are suggested to be improved first. These interventions also seek to address issues negatively impacting shops and workshops in Nabaa. The strategy does not take into account the need for general maintenance and improvements of privately owned buildings, though it suggests interventions for substandard shelters.

Projects mentioned are detailed in terms of number of buildings impacted (🏠), number of residents and beneficiaries (👤) and number of (work)shops (🏭) which directly benefit from the interventions and estimated project costs (US\$).

**ENHANCE BUILDING CONDITION & SERVICES**  
Enhance building structural condition and improve building connections to infrastructure services.

**ADDRESS ELECTRICITY MANAGEMENT**  
Improve electricity networks and supply continuities for streets accessibility, safety and security.

**IMPROVE WASTE WATER MANAGEMENT**  
Upgrade/separate/extend waste and storm water networks to mitigate flooding and enhance public health.

**FACILITATE CIRCULATION**  
Enhance the neighbourhood's accessibility by addressing roads and sidewalks, and its connectivity to its surrounding.

**PROMOTE SOLID WASTE MANAGEMENT**  
Meet solid waste collection needs, systematise its disposal and resolve informal dumping site

# HOUSING

In the mid-1990s, due to a history of forced population displacement during the early years of the 1975-1990 civil war and a particularly skewed post-war resettlement policy, housing increased in the neighborhood. Many of the buildings had first been developed as self-built ground floor units during the 1950s, and expanded upwards incrementally as additional floors were added in the 1960s. A large number of property owners do not live in the neighbourhood and have gradually opted to delegate the management of their properties to a handful of local realtors. This trend has intensified since the onset of the Syrian refugee crisis and the departure of Lebanese families from the area. As a dense residential neighbourhood, Nabaa is composed of multi-storey apartment buildings mostly dating to the 1950s<sup>2</sup>.

Proposed **housing** related interventions include addressing building structural conditions, improving common areas of buildings, and increasing potable water accessibility.

## BUILDING STRUCTURAL CONDITIONS

Main structure | Skeleton | Foundations



Figure 35 Building structural condition (phased response)

- Severe structural hazards
- Substandard structural conditions
- Fair structural conditions

### IMMEDIATE RESPONSE 6 months

- Establish a mechanism for municipality / RTO technical teams to monitor structural hazards of buildings, liaise with private owners and follow up on critical hazards (e.g. severely damaged foundation elements, columns, and load-bearing walls, beams or slabs).

51 1,180

### SHORT TERM RESPONSE 12 months

- Structurally stabilise signs of distress by reinforcing cracks, leaks and visible water penetrations impacting vulnerable households.

187 4,441

### MID TERM RESPONSE 2 years

- Perform patch and repair on all minor cracks and potential areas for water penetration impacting vulnerable households.

364 7141

## EXTERIOR BUILDING CONDITIONS

Structure | Exterior walls | Roof | Windows | Balconies | Fixed features



Figure 36 Building exterior condition (phased response)

- Dilapidated exterior conditions
- Substandard exterior conditions
- Fair exterior conditions

### IMMEDIATE RESPONSE 6 months

- Repair severely damaged walls, balconies with extensive failure and/or deflection, dilapidated windows/ doors, leaking roofs and unstable fixed features in buildings with vulnerable households.
- Identify solutions and temporary improvements for rooftop shelters of substandard buildings with the municipality and Ministry of Social Affairs.

44 1,127

### SHORT TERM RESPONSE 12 months

- Retrofit parts/assemblies that have started to fail due to infiltration of water and are showing visible signs of deterioration in buildings with vulnerable households.
- Establish a mechanism for the municipality's RTO to continue monitoring exterior building hazards.

218 5,139



<sup>2</sup> UN-Habitat Lebanon (2014), Housing Land and Property Issues in Lebanon

## COMMON BUILDING AREAS

Means of Exit | Entrances | Lighting | Provisions for people with disabilities.



Figure 37 Communal spaces condition (phased response)

- No or damages gates
- Gates with major defects
- Gates with minor defects

### IMMEDIATE RESPONSE 6 months

- Coordinate with building owners to install exit gates for security or to replace gates that do not function in severely distressed buildings.
- Coordinate with building owners to make entrances accessible at entrance level and remove all physical impediments blocking exits for fire safety that can be manually removed.
- Coordinate with building owners to address areas where lights do not function by replacing bulbs and/or replacing faulty wiring, fixtures and electrical connections (preferably using solar lighting).
- Engage the community in cleaning and maintaining buildings' common spaces which constitute a security threat as well as a safety risk for women, young girls and children (ie common harassment behaviour or children mixing with gang members at night).

### SHORT TERM RESPONSE 12 months

- Coordinate with building owners to make entrances accessible at entrance level and remove all physical impediments blocking exits for fire safety that cannot be easily removed with assistance.
- Establish building maintenance committees which can ensure minor repair and routine maintenance of building common areas.



57 1,737 145,000

## BUILDING CONNECTION TO POTABLE WATER SUPPLY



Figure 38 Building connection to the potable water supply (phased response)

- Not connected
- Connected with serious defects
- Connected with minor defects

### IMMEDIATE RESPONSE 6 months

- Connect buildings to domestic water supply network.

### SHORT TERM RESPONSE 12 months

- Replace building pipes with major leakages or deterioration.

### MID TERM RESPONSE 2 years

- Establish a maintenance committee to ensure minor repair and routine maintenance on building pipes is sustained.



41 1,408 123,000

130 3,019 195,000

416 7,942 470,000



© S. Bergby, UN-Habitat (2016)

## HOUSING ISSUES

- Establish an information centre for mediation and legal advice addressing HLP<sup>2</sup> protection concerns.
- Leverage Municipality to work with shelter actors to establish rent and rehabilitation rules and uniform regulations for all housing brokers with necessary monitoring.



765 14,760

# STORM & WASTE WATER MANAGEMENT

Address Nabaa's overloaded wastewater network and stormwater drainage issues (eg 82.5% of the gullies are non-functional) by phased upgrading for wastewater and stormwater network, raising hygiene awareness, and developing a maintenance plan. Adequate **wastewater and stormwater management** will help improve public health and enhance street accessibility and economic activities, whilst also protecting Beirut River's water course and wastewater discharge.

## NETWORK CONDITIONS



	🏠	👥	\$
<b>IMMEDIATE RESPONSE</b> 6 months			
• Upgrade wastewater network and separate it from storm water - Line 1.	3,420		100\$/lm
• Remove the culvert Line 1, and upgrade stormwater networks in Lines 1 to 4 with all respective grates.	9,333		90\$/lm
• Develop maintenance plan with the municipality and neighbourhood committee.	14 760		10,000
• Conduct hygiene awareness-raising in the community and schools.			
<b>SHORT TERM RESPONSE</b> 12 months			
• Upgrade wastewater networks in Lines 2 to 8.	9,500		100\$/lm
• Upgrade stormwater networks in Lines 5 to 8.	4,060		90\$/lm
• Strengthen Municipality's RTO by building its capacity to assess and monitor emerging needs.			
<b>MID TERM RESPONSE</b> 2 years			
• Upgrade all internal wastewater/ stormwater arterials and connect them to previously installed lines.			WW 90\$/lm SW 80\$/lm
• Patch and repair all water ponding areas.	29		150\$/hole
<b>LONG TERM RESPONSE</b> 4 years			
• Promote integrated design and greenery for rainwater collection.			
• Upgrade stormwater collector and extend it to Beirut River. <sup>3</sup>			120\$/lm
• Upgrade wastewater collector and extend it to waste water lifting station - Line 1.			120\$/lm

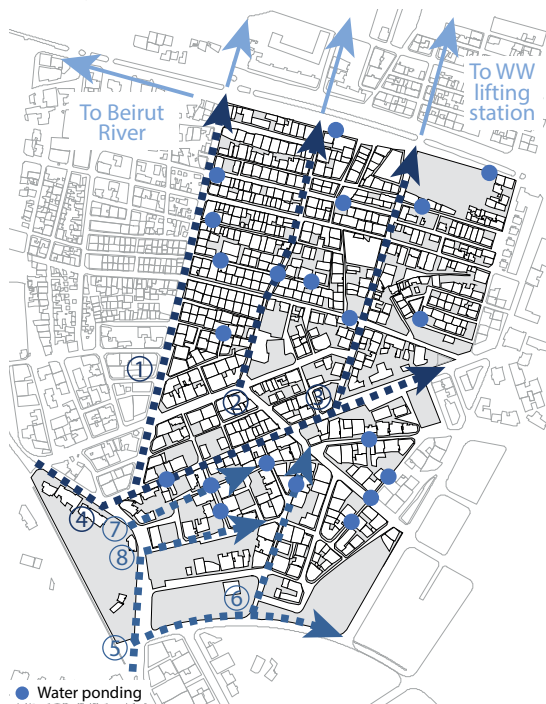
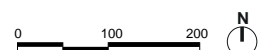


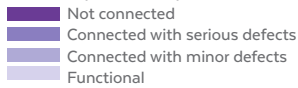
Figure 39 Stormwater and wastewater network response plan



## BUILDING CONNECTIONS TO WASTEWATER NETWORK



Figure 40 Building connection to wastewater network (phased response)



### IMMEDIATE RESPONSE 6 months

- Connect buildings not connected to wastewater network in buildings with vulnerable households.
- Unclog blocked and flooding wastewater plumbing system in buildings with vulnerable households.
- Remove critical blockages that are flooding and discharging to basements or streets in buildings with vulnerable households.

### SHORT TERM RESPONSE 12 months

- Repair wastewater plumbing system with major leakage problems.
- Connect wastewater pipes to septic tanks and/or network where possible.
- Address all blockages that flood and discharge within basements or streets.

### MID TERM RESPONSE 2 years

- Repair wastewater plumbing system with minor leakages.
- Coordinate with building owners (& building maintenance committees) to perform routine maintenance to the plumbing system which is installed internally and/or on external walls and connect it to the network when necessary.



28 766 30,000

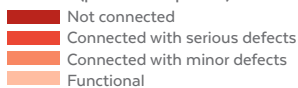
180 4,825 60,000

371 6,471 80,000

## BUILDING CONNECTIONS TO STORMWATER NETWORK



Figure 41 Building connection to stormwater network (phased response)



### IMMEDIATE RESPONSE 6 months

- Connect buildings to stormwater network.
- Install stormwater pipes in buildings that lack them.
- Repair water leakage on external building walls (when leaking penetrates inside).

### SHORT TERM RESPONSE 12 months

- Repair installed yet leaking stormwater pipes.
- Connect pipes to the network and mitigate discharge on street.

### MID TERM RESPONSE 2 years

- Address street discharge from stormwater pipes installed on external walls.
- Establish a mechanism for the municipality's RTO to continue assessing and monitoring storm/wastewater network emerging issues.



35 804 25,000

215 5,511 75,000

380 6,950 60,000

# ELECTRICITY MANAGEMENT

**Electric infrastructure** in Nabaa faces various challenges with illegal connections, haphazard wiring and polluting private generators which impact on safety and security, accessibility and economic activity. Addressing the safety of wire arrangements, private generators, electricity outages and dark streets, and the over-burdened network is key to enhancing living conditions, safety and productivity.

## STREET ELECTRICITY



Figure 42 Electricity management (phased response)

- \* Private generator
- Tangled wires
- Electric hazards
- Minor lighting defects
- Unlit areas

### IMMEDIATE RESPONSE 6 months

- Enhance safety through instalment of light fixtures in unlit streets, preferably with solar lighting.
- Advocate for temporary generator owners to power the lighting of streets during public electricity outages in areas with no solar power yet established.
- Take measures to address air and noise pollution from private generators in dense residential locations (eg filters, muted generators etc.).

14	1,484	1,600/fix.

### SHORT TERM RESPONSE 12 months

- Enable the municipality/RTO to enhance safe accessibility within Nabaa by monitoring streets with minor lighting defects (with solutions preferably involving solar lighting).
- Address safety measures pertaining to electric wires which are installed externally with limited safety or weatherproofing measures.
- Address poor and medium condition power connections, in collaboration with MOEW & EDL by establishing a follow-up mechanism with the municipality / RTO.
- Study the condition of tangled wires, connections and safety measures, and plan a rewiring scheme and implementation plan in coordination with stakeholders (local committee, private generators, internet providers & municipality) in collaboration with MOEW & EDL.

127	7,335	1,600/fix 600/pole 250/bulb 150/battery
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### MID TERM RESPONSE 2 years

- Rehabilitate/rearrange and repair electric connections (tangled wires, deflected poles etc.) which are dangerous to building residents and pedestrians and/or not connected to the network.

## BUILDING CONNECTION TO PUBLIC/PRIVATE ELECTRICITY & TELECOM



Figure 43 Building connection to electricity (phased response)

- Not connected
- Connected with serious defects
- Connected with minor defects

### IMMEDIATE RESPONSE 6 months

- Connect buildings to the electric grid.
- Replace wire connections which are dangerous to building residents, or remove those not connected to the network.

24	726	96,000

### SHORT TERM RESPONSE 12 months

- Rearrange and repair electric wire connections which are dangerous to building residents and/or not connected to the network.

180	4,460	270,000
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### MID TERM RESPONSE 2 years

- Initiate a pilot for solar power panels on rooftops of public institutions/social service buildings in Bourj Hammoud to reduce the dependency on generators.



# CIRCULATION FACILITATION

Nabaa's ease of accessibility within and connection to Bourj Hammoud, surrounding industrial areas and Beirut is integral to capitalising on its economic opportunities. This entails rehabilitating deteriorated roads, keeping sidewalks accessible and improving the neighbourhood's **circulation and connectivity**.



Figure 44 Road condition (phased response)

- Deteriorated roads
- Roads with minor signs of deterioration
- Prototype Streetscape
- ↔ Nabaa's connectivity to Bourj Hammoud
- Main neighbourhood entrances



Figure 45 Sidewalk condition (phased response)

- Non existing sidewalks
- Sidewalks with major signs of deterioration

## IMMEDIATE RESPONSE 6 months

- Rehabilitate roads with major signs of deterioration (deteriorated asphalt, potholes, water ponds etc.).

## SHORT TERM RESPONSE 12 months

- Enhance Nabaa's internal accessibility by adding missing sidewalks needed in primary roads with high vehicular and pedestrian throughflow.
- Enforce regulations against blocking sidewalks adjacent to shops/workshops by goods or parked vehicles.
- Rehabilitate roads with minor signs of deterioration (deteriorated asphalt, potholes, water ponds etc.).
- Improve Nabaa's external connectivity to Bourj Hammoud through various interventions such as:
  - North side: Address the bridge dividing the neighbourhood by transforming the under-bridge area to an inviting public space with temporary interventions.
  - North side: Enhance access to municipal gardens north of Nabaa in Bourj Hammoud through designing safe pedestrian crossings (speed bumps, cats' eyes, painted road markings where necessary), increasing advertisement to visit the gardens, and organising events which are attractive to the Nabaa community.

## MID TERM RESPONSE 2 years

- Plan and execute a prototype street (incorporating street lighting, paving, greening) located on a high visibility, intensely used thoroughfare (eg Mar Takla School street as requested by the local representatives groups).



85

242

# SOLID WASTE MANAGEMENT

Address the poor **solid waste management** infrastructure, widespread on-street littering and the inadequate collection system by rehabilitating existing dumpsite, meeting solid waste collection needs, systematising disposal, raising awareness and supporting the municipality by building its capacity.



Figure 46 Solid waste management (phased response)



## IMMEDIATE RESPONSE 6 months

- Rehabilitate the existing dumping site (DS) and support the municipality in shifting to proper dumping systems.
- Subsequently provide 5m<sup>3</sup> dumpsters at existing dumping site.
- Pilot the provision of wheelie bins for a group of buildings as a substitute for placing the unwelcomed dumpsters in secondary & tertiary roads.
- Support the municipality in addressing gaps, monitoring interventions & launching an awareness campaign in the community and schools on solid waste management, 3Rs & an anti-littering campaign in coordination with the neighbourhood committee.
- Capitalise on existing informal sorting practices by establishing a system between the formal and informal solid waste management sectors.

	\$
14,760	50,000
14,760	25,000

## SHORT TERM RESPONSE 12 months

- Provide a recycling wheelie bin (240L) for each building.
- Upgrade the collection system through a well-defined schedule, in coordination with the municipality, private service providers and Nabaa residents.
- Leverage municipal law enforcement to administer fines on solid waste violations.

US\$40/Wheelie

## MID TERM RESPONSE 2 years

- Establish adjacent to Bourj Hammoud controlled dumpsite a secondary sorting centre for recycling Bourj Hammoud solid waste.
- Support the municipality in developing an integrated waste management plan for a zero-waste strategy for all Bourj Hammoud.



## INTEGRATED APPROACH

The neighbourhood approach promotes multi-sectoral objectives integrated within a spatial framework. Figure 20 suggests key interfaces between urban upgrading and community development. Urban upgrading can advance agendas related to the concerns of safety and security, public health, accessibility and economy development, which may in turn positively impact on the development of the Nabaa community.

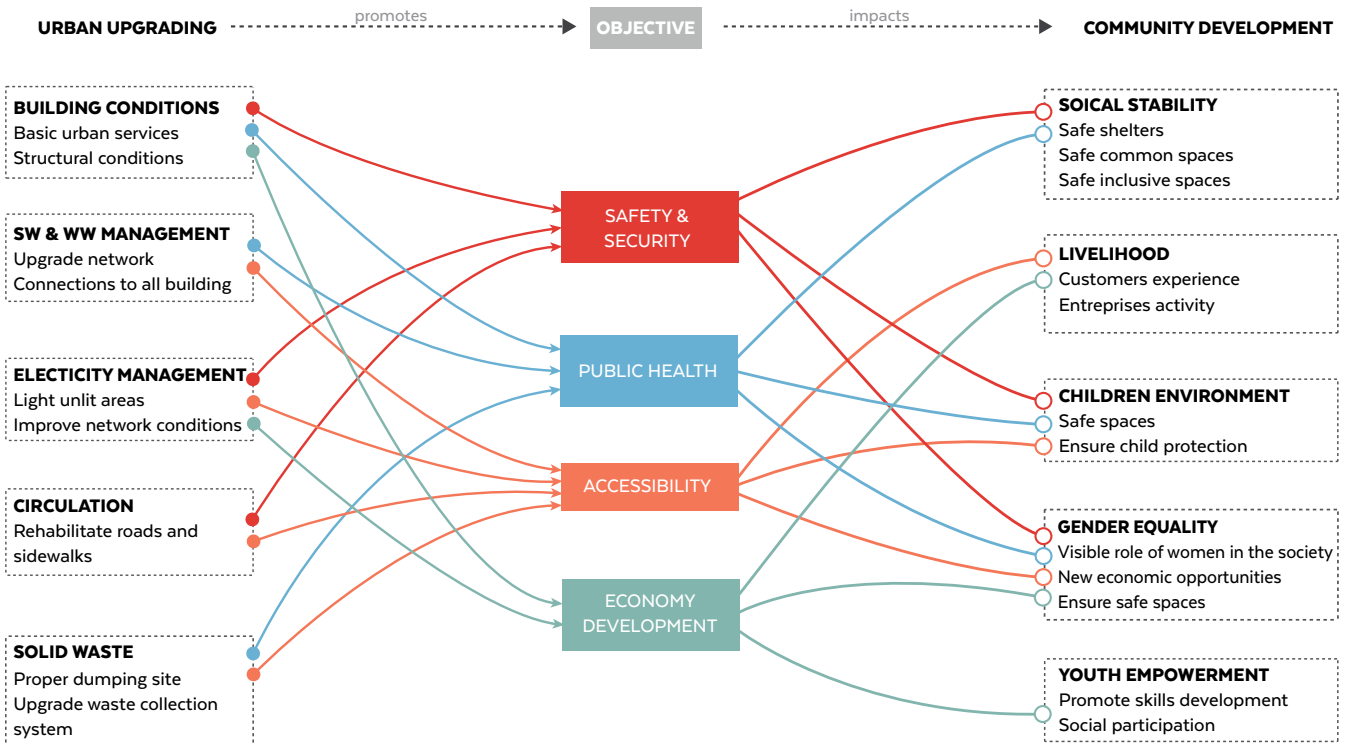


Figure 47 Inter-linkages between urban upgrading interventions and community development responses





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